

521

50 55 60
Asn Asp Val Leu His Ala Glu Asn Val Lys Ala Gly Arg Asp Lys Tyr
65 70 75 80
Lys Thr Leu Arg Gln Ile Arg Gln Gly Asn Thr Lys Gln Arg Ile Asp
85 90 95
Glu Phe Glu Ala Met
100

<210> 566
<211> 25
<212> PRT
<213> Homo sapiens

<400> 566
Thr Ala Asp Leu Val Ile Arg Pro Pro Arg Pro Leu Lys Val Leu Gly
1 5 10 15
Phe Cys Val Phe Cys Ala Pro Pro Leu
20 25

<210> 567
<211> 274
<212> PRT
<213> Homo sapiens

<220>
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<222> (182)
<223> Xaa equals any of the naturally occurring L-amino acids

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522

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<222> (231)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 567

Ala	Ser	Pro	Glu	Val	Glu	Ala	Gly	Ala	Ala	Arg	Gln	Pro	Leu	Leu	Gly
1				5				10					15		
Val	Ala	Gly	Gly	Gln	Thr	Leu	Gly	Ala	Thr	Pro	Gly	Pro	Val	Met	Asn
			20				25					30			
Gly	Pro	Ala	Asp	Gly	Glu	Val	Asp	Tyr	Lys	Lys	Lys	Tyr	Arg	Asn	Leu
		35					40					45			
Lys	Arg	Lys	Leu	Lys	Phe	Leu	Ile	Tyr	Glu	His	Glu	Cys	Phe	Gln	Glu
	50					55					60				
Glu	Leu	Arg	Lys	Ala	Gln	Arg	Lys	Leu	Leu	Lys	Val	Ser	Arg	Asp	Lys
65					70					75					80
Ser	Phe	Leu	Leu	Asp	Arg	Leu	Leu	Gln	Tyr	Glu	Asn	Val	Asp	Glu	Asp
				85					90					95	
Ser	Ser	Asp	Ser	Asp	Ala	Thr	Ala	Ser	Ser	Asp	Asn	Ser	Glu	Thr	Glu
			100					105					110		
Gly	Thr	Pro	Lys	Leu	Ser	Asp	Thr	Pro	Ala	Pro	Lys	Arg	Lys	Arg	Ser
		115					120					125			
Pro	Pro	Leu	Gly	Gly	Ala	Pro	Ser	Pro	Ser	Ser	Leu	Ser	Leu	Pro	Pro
		130				135					140				
Ser	Thr	Gly	Phe	Pro	Leu	Gln	Ala	Ser	Gly	Val	Pro	Ser	Pro	Tyr	Leu
145					150					155					160
Ser	Ser	Leu	Ala	Ser	Ser	Arg	Tyr	Pro	Pro	Phe	Pro	Ser	Asp	Tyr	Leu
				165					170					175	
Ala	Leu	Gln	Leu	Pro	Xaa	Pro	Ser	Pro	Leu	Arg	Pro	Lys	Arg	Glu	Lys
			180					185					190		
Arg	Pro	Arg	Leu	Pro	Arg	Lys	Leu	Lys	Met	Ala	Val	Gly	Pro	Pro	Asp
		195					200					205			

523

Cys Pro Val Gly Gly Pro Leu Xaa Phe Pro Gly Arg Gly Xaa Gly Xaa
 210 215 220
 Gly Val Gly Xaa Thr Leu Xaa Pro Leu Pro Pro Pro Lys Met Pro Pro
 225 230 235 240
 Pro Thr Ile Leu Ser Thr Val Pro Arg Gln Met Phe Ser Asp Ala Gly
 245 250 255
 Ser Gly Asp Asp Ala Leu Asp Gly Asp Asp Asp Leu Val Ile Asp Ile
 260 265 270
 Pro Glu

<210> 568

<211> 133

<212> PRT

<213> Homo sapiens

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<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 568

Ala Arg Gly Asp His Val Arg Ser Arg Glu Thr Gly Arg Gln Ser Ala
 1 5 10 15
 Ser Lys Gly Gln Ile Pro Leu Leu Pro Arg Gly Pro Ala Val Pro Gly
 20 25 30
 Gly Pro Ser Ala Gln Thr Ala Ala Gln Arg Glu Leu Arg Gly Xaa Val
 35 40 45
 Gly Ala Gly Ala Pro Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr
 50 55 60
 Ala Glu Ile Leu Glu Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys
 65 70 75 80
 Thr Arg Ile Ile Pro Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu
 85 90 95
 Glu Leu Asn Lys Leu Leu Gly Lys Val Thr Ile Ala Gln Gly Gly Val
 100 105 110
 Leu Pro Asn Ile Gln Ala Val Leu Leu Pro Lys Lys Thr Glu Ser Gln
 115 120 125

524

Lys Thr Lys Ser Lys
130

<210> 569
<211> 153
<212> PRT
<213> Homo sapiens

<220>
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<222> (136)
<223> Xaa equals any of the naturally occurring L-amino acids

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<400> 569
Met Cys Arg Gly Tyr Ala Trp Asn Pro Gly Ile Thr Leu Gln Asn Arg
1 5 10 15
Lys Thr Lys Glu Gly Pro Arg Ala Pro Pro Ser Arg Met Pro Glu Pro
20 25 30
Ala Gly Gly Leu Arg Gly Cys Glu Ala Val Gly Thr Leu Leu Met Lys
35 40 45
Glu Thr Val Phe Ala Leu His Pro Ser Leu Pro Leu Gly Ala Gly Ser
50 55 60
Ser Pro Ser Ala Thr Cys Ser Glu Gly Leu His Leu Arg Gly Glu Gly
65 70 75 80
Trp Gly Lys Ser Pro Pro Val Pro Phe Leu Trp Pro Cys Cys Pro His
85 90 95
Thr Gln Leu Arg Gly Pro Thr Leu Gly Lys Ala Gly Ser Ala Arg Ser
100 105 110
Leu Ser Pro Ile Ser Ala Leu Ser Ala Trp Ile Pro Ala Glu Ala Met
115 120 125

525

Lys Gly Asn Lys Glu Lys Arg Xaa Xaa Lys Lys Lys Lys Lys Lys Lys
 130 135 140

Lys Lys Lys Lys Lys Lys Lys Xaa Pro
 145 150

<210> 570

<211> 327

<212> PRT

<213> Homo sapiens

<400> 570

Pro Gly Ser Pro Arg Arg Cys Asp Ile Ile Ile Ile Ser Gly Arg Lys
 1 5 10 15

Glu Lys Cys Glu Ala Ala Lys Glu Ala Leu Glu Ala Leu Val Pro Val
 20 25 30

Thr Ile Glu Val Glu Val Pro Phe Asp Leu His Arg Tyr Val Ile Gly
 35 40 45

Gln Lys Gly Ser Gly Ile Arg Lys Met Met Asp Glu Phe Glu Val Asn
 50 55 60

Ile His Val Pro Ala Pro Glu Leu Gln Ser Asp Ile Ile Ala Ile Thr
 65 70 75 80

Gly Leu Ala Ala Asn Leu Asp Arg Ala Lys Ala Gly Leu Leu Glu Arg
 85 90 95

Val Lys Glu Leu Gln Ala Glu Gln Glu Asp Arg Ala Leu Arg Ser Phe
 100 105 110

Lys Leu Ser Val Thr Val Asp Pro Lys Tyr His Pro Lys Ile Ile Gly
 115 120 125

Arg Lys Gly Ala Val Ile Thr Gln Ile Arg Leu Glu His Asp Val Asn
 130 135 140

Ile Gln Phe Pro Asp Lys Asp Asp Gly Asn Gln Pro Gln Asp Gln Ile
 145 150 155 160

Thr Ile Thr Gly Tyr Glu Lys Asn Thr Glu Ala Ala Arg Asp Ala Ile
 165 170 175

Leu Arg Ile Val Gly Glu Leu Glu Gln Met Val Ser Glu Asp Val Pro
 180 185 190

Leu Asp His Arg Val His Ala Arg Ile Ile Gly Ala Arg Gly Lys Ala

526

195	200	205
Ile Arg Lys Ile Met Asp Glu Phe Lys Val Asp Ile Arg Phe Pro Gln		
210	215	220
Ser Gly Ala Pro Asp Pro Asn Cys Val Thr Val Thr Gly Leu Pro Glu		
225	230	235
Asn Val Glu Glu Ala Ile Asp His Ile Leu Asn Leu Glu Glu Glu Tyr		
245	250	255
Leu Ala Asp Val Val Asp Ser Glu Ala Leu Gln Val Tyr Met Lys Pro		
260	265	270
Pro Ala His Glu Glu Ala Lys Ala Pro Ser Arg Gly Phe Val Val Arg		
275	280	285
Asp Ala Pro Trp Thr Ala Ser Ser Ser Glu Lys Ala Pro Asp Met Ser		
290	295	300
Ser Ser Glu Glu Phe Pro Ser Phe Gly Ala Gln Val Ala Pro Lys Thr		
305	310	315
Leu Pro Trp Gly Pro Lys Arg		
325		

<210> 571

<211> 166

<212> PRT

<213> Homo sapiens

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<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 571

Gly Asn Ser Arg Val Asp Pro Arg Xaa Arg Gly Xaa Ala His Thr Cys
1 5 10 15

Ala Pro Cys Pro Ala Pro Gly Pro Leu Ala Gly Arg Ala Val Ser Gly
20 25 30

His Gly Ser Leu Pro Pro Asp Arg Arg Ala Pro Ser Ala Leu Ser Ser

527

35	40	45
Pro Ala Asp Glu Gly Glu Arg Arg Arg Pro Asp Leu Asp Glu Ile His		
50	55	60
Arg Glu Leu Arg Pro Gln Gly Ser Ala Arg Pro Gln Pro Asp Pro Asn		
65	70	75 80
Ala Glu Phe Asp Pro Asp Leu Pro Gly Gly Gly Leu His Arg Cys Leu		
85	90	95
Ala Cys Ala Arg Tyr Phe Ile Asp Ser Thr Asn Leu Lys Thr His Phe		
100	105	110
Arg Ser Lys Asp His Lys Lys Arg Leu Lys Gln Leu Ser Val Glu Pro		
115	120	125
Tyr Ser Gln Glu Glu Ala Glu Arg Ala Ala Gly Met Gly Ser Tyr Val		
130	135	140
Pro Pro Arg Arg Leu Ala Val Pro Thr Glu Val Ser Thr Glu Val Pro		
145	150	155 160
Glu Met Asp Thr Ser Thr		
165		

<210> 572
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 572

Gln Ser Ser Thr Phe His Pro Ala Pro Ala Phe Gly Ala Thr Val Ala
1 5 10 15
Ala Phe His Arg Arg Ala Ala Leu Arg Ala Pro Glu Pro Ala Met Ser
20 25 30
Gly Pro Asn Gly Asp Leu Gly Met Pro Val Glu Ala Gly Ala Glu Gly
35 40 45
Glu Glu Asp Gly Phe Gly Glu Ala Glu Tyr Ala Ala Ile Asn Ser Met
50 55 60
Leu Asp Gln Ile Asn Ser Cys Leu Asp His Leu Glu Glu Lys Asn Asp
65 70 75 80
His Leu His Ala Arg Leu Gln Glu Leu Leu Glu Ser Asn Arg Gln Thr
85 90 95

528

Arg Leu Glu Phe Gln Gln Gln Leu Gly Glu Ala Pro Ser Asp Ala Ser
 100 105 110

Pro

<210> 573

<211> 99

<212> PRT

<213> Homo sapiens

<220>

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<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 573

Gly Ser Gly Ser Ser Arg Asp Leu His Lys Ala Leu Trp Glu Ala Gly
 1 5 10 15

Trp Glu Thr Val Glu Gly Gly Cys Pro Leu Xaa Pro Arg Arg His Arg
 20 25 30

Ile Trp Ala Leu Xaa Xaa Ala Phe Leu Pro Glu Tyr Ala Ala Ile Asn
 35 40 45

Ser Met Leu Asp Gln Ile Asn Ser Cys Leu Asp His Leu Glu Glu Lys
 50 55 60

Asn Asp His Leu His Ala Arg Leu Gln Glu Leu Leu Glu Ser Asn Arg
 65 70 75 80

Gln Thr Arg Leu Glu Phe Gln Gln Gln Leu Gly Glu Ala Pro Ser Asp
 85 90 95

Ala Ser Pro

529

<210> 574
 <211> 197
 <212> PRT
 <213> Homo sapiens

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<220>
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<400> 574
 Arg Trp Ala Arg Val Glu Ala Ala Val Met Glu Gly Ala Gly Ala Gly
 1 5 10 15
 Ser Gly Phe Arg Lys Glu Leu Val Ser Arg Leu Leu His Leu His Phe
 20 25 30
 Lys Asp Asp Lys Thr Lys Val Ser Gly Asp Ala Leu Gln Leu Met Val
 35 40 45
 Glu Leu Leu Lys Val Phe Val Val Glu Ala Ala Val Arg Gly Val Arg
 50 55 60
 Gln Ala Gln Ala Glu Asp Ala Leu Arg Val Asp Val Asp Gln Leu Glu
 65 70 75 80
 Lys Val Leu Arg Ser Cys Ser Gly Leu Leu Gly Ile Ser Ala Val Ala
 85 90 95
 Xaa Ala Thr Pro Arg Gly Ala Pro Gly Pro Gln Lys Gln Ala Leu Cys
 100 105 110
 Phe Gln Arg Pro Leu Ile Arg Gly Arg Glu Gly Xaa Glu Gly Phe Gly
 115 120 125
 Xaa Asp Ser Asn Lys Ile Ser Gly Ser Leu Gln Pro Val Gln Lys Gly
 130 135 140
 Gln Asp Cys Ser Ala Leu Arg Ala Leu Glu Cys Pro Val Gly Thr Leu

530

145 150 155 160
 Val Trp Glu Gly Ala Ala Pro Gly Glu Ser Leu Pro Leu Leu Pro Gly
 165 170 175
 Thr Ile Val Cys Met Pro Pro Gly Val Leu Gln Ala Gly Ala Gly Lys
 180 185 190
 Gly Leu Ala Ser Arg
 195

<210> 575
 <211> 47
 <212> PRT
 <213> Homo sapiens

<400> 575
 Leu Pro Met Val Asp Leu Met Glu Lys Leu Asn Ile Phe His Tyr Ala
 1 5 10 15
 Leu Gln Asn Thr Val Tyr Val Ser Ala Ser Leu Gly Asn Gly Arg Gly
 20 25 30
 Gln Lys Lys Val Thr Phe Asn Leu Cys Ile Phe Ala Lys Pro Tyr
 35 40 45

<210> 576
 <211> 115
 <212> PRT
 <213> Homo sapiens

<400> 576
 Trp Ser Arg Thr Ser Gln Pro Leu Pro Ser Thr Val Gly Cys Pro Arg
 1 5 10 15
 Arg Arg Gly Phe Lys Asp Phe Gln Arg Arg Ile Leu Val Ala Thr Asn
 20 25 30
 Leu Phe Gly Arg Gly Met Asp Ile Glu Arg Val Asn Ile Ala Phe Asn
 35 40 45
 Tyr Asp Met Pro Glu Asp Ser Asp Thr Tyr Leu His Arg Val Ala Arg
 50 55 60
 Ala Gly Arg Phe Gly Thr Lys Gly Leu Ala Ile Thr Phe Val Ser Asp
 65 70 75 80

531

Glu Asn Asp Ala Lys Ile Leu Asn Asp Val Gln Asp Arg Phe Glu Val
85 90 95

Asn Ile Ser Glu Leu Pro Asp Glu Ile Asp Ile Ser Ser Tyr Ile Glu
100 105 110

Gln Thr Arg
115

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<210> 577
<211> 346
<212> PRT
<213> Homo sapiens
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 577
Val Thr Ser Cys Val Ala Leu Leu Pro Ala Arg Arg Met Thr Tyr Thr
  1              5              10              15

Thr Glu Thr Ala Leu Leu Asn Trp Ser Thr Cys Gln Met Val Leu Arg
      20              25              30

Gly Ala Glu Thr Xaa Gly Cys Val Ile Val Ser Ala Ala Lys Ala Gln
      35              40              45

Leu Leu Gln Cys Gln His His Pro Ala Trp Tyr Gly Asp Thr Leu Lys
  50              55              60

Gln Lys Thr Ser Trp Thr Cys Leu Leu Asp Gly Met Gln Tyr Phe Ala
  65              70              75              80

Thr Thr Glu Ser Ser Pro Thr Glu Gln Asp Gly Arg Gln Leu Trp Leu
      85              90              95

Glu Val Lys Asn Ile Glu Glu His Arg Gln Arg Ser Leu Asp Ser Val
      100              105              110

Gln Glu Leu Met Glu Ser Gly Gln Ala Val Gly Gly Met Val Thr Thr
      115              120              125

Thr Thr Asp Trp Asn Gln Pro Ala Glu Ala Gln Gln Ala Gln Gln Val
      130              135              140

Gln Arg Ile Ile Ser Arg Cys Asn Cys Arg Met Tyr Tyr Ile Ser Tyr
  145              150              155              160

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532

Ser His Asp Ile Asp Pro Glu Leu Ala Thr Gln Ile Lys Pro Pro Glu
 165 170 175
 Val Leu Glu Asn Gln Glu Lys Glu Asp Leu Leu Lys Lys Gln Glu Gly
 180 185 190
 Ala Val Asp Thr Phe Thr Leu Ile His His Glu Leu Glu Ile Ser Thr
 195 200 205
 Asn Pro Ala Gln Tyr Ala Met Ile Leu Asp Ile Val Asn Asn Leu Leu
 210 215 220
 Leu His Val Glu Pro Lys Arg Lys Glu His Ser Glu Lys Lys Gln Arg
 225 230 235 240
 Val Arg Phe Gln Leu Glu Ile Ser Ser Asn Pro Glu Glu Gln Arg Ser
 245 250 255
 Ser Ile Leu His Leu Gln Glu Ala Val Arg Gln His Val Ala Gln Ile
 260 265 270
 Arg Gln Leu Glu Lys Gln Met Tyr Ser Ile Met Lys Ser Leu Gln Asp
 275 280 285
 Asp Ser Lys Asn Glu Asn Leu Leu Asp Leu Asn Gln Lys Leu Gln Leu
 290 295 300
 Gln Leu Asn Gln Glu Lys Ala Asn Leu Gln Leu Glu Ser Glu Glu Leu
 305 310 315 320
 Asn Ile Leu Ile Arg Cys Phe Lys Asp Phe Gln Leu Gln Arg Ala Asn
 325 330 335
 Lys Met Glu Leu Arg Lys His Lys Lys Met
 340 345

<210> 578

<211> 91

<212> PRT

<213> Homo sapiens

<400> 578

Arg His Glu Gly His Leu Gly Ser Gly Arg Asn Gly Gly Gly Ser Met
 1 5 10 15

Asn Ala Pro Pro Ala Phe Glu Ser Phe Leu Leu Phe Glu Gly Glu Lys
 20 25 30

533

Ile Thr Ile Asn Lys Asp Thr Lys Val Pro Asn Ala Cys Leu Phe Thr
35 40 45

Ile Asn Lys Glu Asp His Thr Leu Gly Asn Ile Ile Lys Ser Arg Ala
50 55 60

Cys Phe Pro Phe Ala Phe Cys Arg Asp Cys Gln Phe Pro Glu Ala Ser
65 70 75 80

Pro Ala Thr Leu Pro Val Gln Pro Ala Glu Leu
85 90

<210> 579

<211> 331

<212> PRT

<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (20)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (300)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (311)

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<220>

<221> SITE

<222> (313)

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<222> (320)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

534

<222> (325)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 579

Gly	Arg	Pro	Thr	Arg	Pro	Gly	Gly	Leu	Gly	Ser	Gly	Val	Leu	Ala	Leu	1	5	10	15
Ala	Xaa	Gly	Xaa	Pro	Ala	Arg	Leu	Ala	Gly	Thr	Val	His	Glu	Val	Gly	20	25	30	
Asp	Ala	Pro	Arg	Arg	Ala	Pro	Asp	Gln	Ala	Ala	Glu	Ile	Gly	Ser	Arg	35	40	45	
Gly	Ser	Thr	Lys	Ala	Gln	Gly	Pro	Gln	Gln	Gln	Pro	Gly	Ser	Glu	Gly	50	55	60	
Pro	Ser	Tyr	Ala	Lys	Lys	Val	Ala	Leu	Trp	Leu	Ala	Gly	Leu	Leu	Gly	65	70	75	80
Ala	Gly	Gly	Thr	Val	Ser	Val	Val	Tyr	Ile	Phe	Gly	Asn	Asn	Pro	Val	85	90	95	
Asp	Glu	Asn	Gly	Ala	Lys	Ile	Pro	Asp	Glu	Phe	Asp	Asn	Asp	Pro	Ile	100	105	110	
Leu	Val	Gln	Gln	Leu	Arg	Arg	Thr	Tyr	Lys	Tyr	Phe	Lys	Asp	Tyr	Arg	115	120	125	
Gln	Met	Ile	Ile	Glu	Pro	Thr	Ser	Pro	Cys	Leu	Leu	Pro	Asp	Pro	Leu	130	135	140	
Gln	Glu	Pro	Tyr	Tyr	Gln	Pro	Pro	Tyr	Thr	Leu	Val	Leu	Glu	Leu	Thr	145	150	155	160
Gly	Val	Leu	Leu	His	Pro	Glu	Trp	Ser	Leu	Ala	Thr	Gly	Trp	Arg	Phe	165	170	175	
Lys	Lys	Arg	Pro	Gly	Ile	Glu	Thr	Leu	Phe	Gln	Gln	Leu	Ala	Pro	Leu	180	185	190	
Tyr	Glu	Ile	Val	Ile	Phe	Thr	Ser	Glu	Thr	Gly	Met	Thr	Ala	Phe	Pro	195	200	205	
Leu	Ile	Asp	Ser	Val	Asp	Pro	His	Gly	Phe	Ile	Ser	Tyr	Arg	Leu	Phe	210	215	220	
Arg	Asp	Ala	Thr	Arg	Tyr	Met	Asp	Gly	His	His	Val	Lys	Asp	Ile	Ser	225	230	235	240
Cys	Leu	Asn	Arg	Asp	Pro	Ala	Arg	Val	Val	Val	Val	Asp	Cys	Lys	Lys	245	250	255	

535

Glu Ala Phe Arg Leu Gln Pro Tyr Asn Gly Val Ala Leu Arg Pro Trp
260 265 270

Asp Gly Asn Ser Asp Asp Arg Val Leu Leu Asp Leu Ser Ala Phe Leu
275 280 285

Lys Thr Ile Ala Leu Asn Gly Val Gly Gly Arg Xaa Glu Pro Cys Trp
290 295 300

Glu His Tyr Ala Leu Gly Xaa Asp Xaa Pro Arg Trp Ala Ala Phe Xaa
305 310 315 320

Asn Ser Gly Lys Xaa Gly Leu Glu Ala Gly Arg
325 330

<210> 580

<211> 374

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (235)

<223> Xaa equals any of the naturally occurring L-amino acids

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<221> SITE

<222> (285)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (307)

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<220>

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<222> (319)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (324)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (341)

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<220>

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<222> (359)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 580

Pro	Ser	Thr	Val	Arg	Asn	Ser	Arg	Val	Asp	Pro	Arg	Val	Arg	Pro	Arg	1	5	10	15
Val	Arg	Ala	Gly	Val	Ala	Ala	Leu	Ala	Thr	Val	Gly	Val	Ala	Ser	Gly	20	25	30	
Pro	Gly	Pro	Gly	Arg	Pro	Gly	Pro	Leu	Gln	Asp	Glu	Thr	Leu	Gly	Val	35	40	45	
Ala	Ser	Val	Pro	Ser	Gln	Trp	Arg	Ala	Val	Gln	Gly	Ile	Arg	Gly	Glu	50	55	60	
Thr	Lys	Ser	Cys	Gln	Thr	Ala	Ser	Ile	Ala	Thr	Ala	Ser	Ala	Ser	Ala	65	70	75	80
Gln	Ala	Arg	Asn	His	Val	Asp	Ala	Gln	Val	Gln	Thr	Glu	Ala	Pro	Val	85	90	95	
Pro	Val	Ser	Val	Gln	Pro	Pro	Ser	Gln	Tyr	Asp	Ile	Pro	Arg	Leu	Ala	100	105	110	
Ala	Phe	Leu	Arg	Arg	Val	Glu	Ala	Met	Val	Ile	Arg	Glu	Leu	Asn	Lys	115	120	125	
Asn	Trp	Gln	Ser	His	Ala	Phe	Asp	Gly	Phe	Glu	Val	Asn	Trp	Thr	Glu	130	135	140	
Gln	Gln	Gln	Met	Val	Ser	Cys	Leu	Tyr	Thr	Leu	Gly	Tyr	Pro	Pro	Ala	145	150	155	160
Gln	Ala	Gln	Gly	Leu	His	Val	Thr	Ser	Ile	Ser	Trp	Asn	Ser	Thr	Gly	165	170	175	
Ser	Val	Val	Ala	Cys	Ala	Tyr	Gly	Arg	Leu	Asp	His	Gly	Asp	Trp	Ser	180	185	190	
Thr	Leu	Lys	Ser	Phe	Val	Cys	Ala	Trp	Asn	Leu	Asp	Arg	Arg	Asp	Leu	195	200	205	
Arg	Pro	Gln	Gln	Pro	Ser	Ala	Val	Val	Glu	Val	Pro	Ser	Ala	Val	Leu	210	215	220	
Cys	Leu	Ala	Phe	His	Pro	Thr	Gln	Pro	Ser	Xaa	Val	Ala	Gly	Gly	Leu				

537

225 230 235 240
 Tyr Ser Gly Glu Val Leu Val Trp Asp Leu Ser Arg Leu Glu Asp Pro
 245 250 255
 Leu Leu Trp Arg Thr Gly Leu Thr Asp Asp Thr His Thr Asp Pro Val
 260 265 270
 Ser Gln Val Val Trp Leu Pro Glu Pro Gly His Ser Xaa Arg Phe Gln
 275 280 285
 Val Leu Ser Val Ala Thr Asp Gly Lys Val Leu Leu Trp Gln Gly Ile
 290 295 300
 Gly Val Xaa Gln Leu Gln Phe Thr Glu Gly Phe Ala Trp Phe Xaa Gln
 305 310 315 320
 Gln Leu Pro Xaa Ser Thr Lys Leu Lys Lys His Pro Arg Gly Arg Pro
 325 330 335
 Arg Trp Ala Pro Xaa Gln Ala Phe Phe Gln Phe Asp Leu Arg Phe Ser
 340 345 350
 Phe Trp Gln Glu Ala Val Xaa Val Gln Phe Ser Trp His Trp Arg Ala
 355 360 365
 Ala Leu Arg Gly Ala His
 370

<210> 581

<211> 94

<212> PRT

<213> Homo sapiens

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<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 581

Cys Pro Asp Gln Asn Gly Trp Ala Ser Phe Gly Ala Pro Leu Ser Ala
 1 5 10 15

Gly Gly Gln Pro Cys Tyr Leu Leu Asp Ile Gly Cys Gly Ser Gly Leu

538

			20					25					30			
Ser	Gly	Asp	Tyr	Leu	Ser	Asp	Glu	Gly	His	Tyr	Trp	Val	Gly	Ile	Asp	
		35					40					45				
Ile	Ser	Pro	Ala	Met	Leu	Asp	Ala	Ala	Leu	Asp	Arg	Asp	Thr	Glu	Gly	
	50					55					60					
Asp	Leu	Leu	Leu	Gly	Asp	Met	Gly	Gln	Gly	Ile	Pro	Phe	Lys	Pro	Xaa	
65					70					75					80	
Ser	Leu	Met	Asp	Val	Ser	Ala	Phe	Cys	Xaa	Ser	Val	Ala	Leu			
				85				90								

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<210> 582
<211> 163
<212> PRT
<213> Homo sapiens
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<400> 582															
Pro	Thr	Arg	Pro	Ala	Ala	Gly	Gly	Ala	Glu	Arg	Ile	Ala	Gly	Ser	Ala
1				5					10					15	
Met	Ser	Ser	Glu	Pro	Pro	Pro	Pro	Pro	Gln	Pro	Pro	Thr	His	Gln	Ala
			20					25					30		
Ser	Val	Gly	Leu	Leu	Asp	Thr	Pro	Arg	Ser	Arg	Glu	Arg	Ser	Pro	Ser
		35					40					45			
Pro	Leu	Arg	Gly	Asn	Val	Val	Pro	Ser	Pro	Leu	Pro	Thr	Arg	Arg	Thr
	50					55					60				
Arg	Thr	Phe	Ser	Ala	Thr	Val	Arg	Ala	Ser	Gln	Gly	Pro	Val	Tyr	Lys
65					70					75					80
Gly	Val	Cys	Lys	Cys	Phe	Cys	Arg	Ser	Lys	Gly	His	Gly	Phe	Ile	Thr
				85					90					95	
Pro	Ala	Asp	Gly	Gly	Pro	Asp	Ile	Phe	Leu	His	Ile	Ser	Asp	Val	Glu
			100					105					110		
Gly	Glu	Tyr	Val	Pro	Val	Glu	Gly	Asp	Glu	Val	Thr	Tyr	Lys	Met	Cys
		115					120					125			
Ser	Ile	Pro	Pro	Lys	Asn	Glu	Lys	Leu	Gln	Ala	Val	Glu	Val	Val	Ile
	130					135					140				
Thr	His	Leu	Ala	Pro	Gly	Thr	Lys	His	Glu	Thr	Trp	Ser	Gly	His	Val
145					150					155					160

Ile Ser Ser

<210> 583

<211> 293

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (53)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (150)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (171)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (207)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (254)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 583

Leu	Leu	Gly	Pro	Asn	Leu	Thr	Met	Gly	Ser	Gln	Pro	Gly	Arg	Ile	Pro
1				5					10					15	

Asp Leu Leu Glu Lys Gly Glu Arg Leu Pro Gln Pro Pro Ile Cys Thr

540

[illegible]

541

290

<210> 584

<211> 132

<212> PRT

<213> Homo sapiens

<400> 584

Gly Gly Ala Gln Pro Gly Met Glu Gly Ala Ala Ala Thr Val His Leu
1 5 10 15

Ile Ser Gln Trp Ala Val Glu Pro Asn Ala Arg Val Gly Pro Leu Leu
20 25 30

Glu Val Glu Ala Ala Ala Ala Asp His His Glu Ala Ala Ala Gly Ala
35 40 45

Gly Ser Ala Val Glu Lys Ile Cys Ile Asp Lys Gly Leu Thr Asp Glu
50 55 60

Ser Glu Ile Leu Arg Phe Leu Gln His Gly Thr Leu Val Gly Leu Leu
65 70 75 80

Pro Val Pro His Pro Ile Leu Ile Arg Lys Tyr Gln Ala Asn Ser Gly
85 90 95

Thr Ala Met Trp Phe Arg Thr Tyr Met Trp Gly Val Ile Tyr Leu Arg
100 105 110

Asn Val Asp Pro Pro Val Trp Tyr Asp Thr Asp Val Lys Leu Phe Glu
115 120 125

Ile Gln Arg Val
130

<210> 585

<211> 218

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (92)
 <223> Xaa equals any of the naturally occurring L-amino acids

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 <222> (141)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
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 <222> (188)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
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 <222> (199)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (200)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 585
 Arg Glu Arg Cys Arg Arg Glu Ala Leu Arg Gly Ser Arg Leu Cys Pro
 1 5 10 15

 Ala Thr Pro Pro Ser Ala Leu Gly Ser Gln Asp Gly Ser Arg Thr Arg
 20 25 30

 Asp Arg Leu Gly Ala Ala Gly Trp Pro Gly Leu Val Val Gly Leu Cys
 35 40 45

 Thr Pro Ala Ala Gly Xaa Gln Arg Asp Leu Leu His Arg Arg Gly Gly
 50 55 60

 Thr Ala Ser Phe Gly Lys Ser Phe Ala Gln Lys Ser Gly Tyr Phe Leu
 65 70 75 80

 Cys Leu Ser Ser Leu Gly Ser Leu Glu Asn Pro Xaa Glu Asn Val Val
 85 90 95

543

Ala Asp Ile Gln Ile Val Val Asp Lys Ser Pro Leu Pro Leu Gly Phe
 100 105 110

Ser Pro Val Cys Xaa Pro Met Asp Ser Lys Ala Ser Val Ser Lys Lys
 115 120 125

Lys Arg Met Cys Val Lys Leu Leu Pro Leu Gly Xaa Xaa Asp Thr Ala
 130 135 140

Val Phe Asp Val Arg Leu Ser Gly Lys Thr Lys Thr Val Pro Gly Tyr
 145 150 155 160

Leu Arg Ile Gly Asp Met Gly Gly Phe Ala Ile Trp Cys Lys Lys Gly
 165 170 175

Gln Gly Pro Glu Ala Ser Cys Pro Lys Pro Arg Xaa Pro Gln Pro Gly
 180 185 190

Thr Cys Lys Gly Phe Ser Xaa Xaa Ala Ala Ser Gln Pro Lys Leu Arg
 195 200 205

Ala Gly Leu Leu Gly Ser Arg Thr Ser Val
 210 215

<210> 586

<211> 233

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 586

Ala Arg Gly Glu Met Glu Gly Arg Gln Val Leu Glu Val Lys Met Gln
 1 5 10 15

Val Glu Tyr Met Ser Phe Ser Ala His Ala Asp Ala Lys Gly Ile Met
 20 25 30

Gln Leu Val Gly Gln Ala Glu Pro Xaa Ser Val Leu Leu Val His Gly
 35 40 45

Glu Ala Lys Lys Met Glu Phe Leu Lys Gln Lys Ile Glu Gln Glu Leu
 50 55 60

Arg Val Asn Cys Tyr Met Pro Ala Asn Gly Glu Thr Val Thr Leu Pro

65				70				75				80			
Thr	Ser	Pro	Ser	Ile	Pro	Val	Gly	Ile	Ser	Leu	Gly	Leu	Leu	Lys	Arg
				85					90					95	
Glu	Met	Ala	Gln	Gly	Leu	Leu	Pro	Glu	Ala	Lys	Lys	Pro	Arg	Leu	Leu
				100					105					110	
His	Gly	Thr	Leu	Ile	Met	Lys	Asp	Ser	Asn	Phe	Arg	Leu	Val	Ser	Ser
				115					120					125	
Glu	Gln	Ala	Leu	Lys	Glu	Leu	Gly	Leu	Ala	Glu	His	Gln	Leu	Arg	Phe
				130					135					140	
Thr	Cys	Arg	Val	His	Leu	His	Asp	Thr	Arg	Lys	Glu	Gln	Glu	Thr	Ala
145				150				155				160			
Leu	Arg	Val	Tyr	Ser	His	Leu	Lys	Ser	Val	Leu	Lys	Asp	His	Cys	Val
				165				170				175			
Gln	His	Leu	Pro	Asp	Gly	Ser	Val	Thr	Val	Glu	Ser	Val	Leu	Leu	Gln
				180				185				190			
Ala	Ala	Ala	Pro	Ser	Glu	Asp	Pro	Gly	Thr	Lys	Val	Leu	Leu	Val	Ser
				195				200				205			
Trp	Thr	Tyr	Gln	Asp	Glu	Glu	Leu	Gly	Ser	Phe	Leu	Thr	Ser	Leu	Leu
210				215				220							
Lys	Lys	Gly	Leu	Pro	Gln	Ala	Pro	Ser							
225				230											

<210> 587

<211> 116

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

$\langle 222 \rangle$ (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 587

Gly Pro Leu Ser His His Ile Arg Ala Gln Leu Ser Lys Met Leu Leu
1 5 10 15

Ala Arg Lys Gln Ile Leu Cys Val Asn Val Lys Asn Phe Ala Val Ile
20 25 30

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<210> 588
<211> 133
<212> PRT
<213> Homo sapiens
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<400> 588
Ala Arg Ala Ala Val Gly Arg Thr Ala Gly Val Arg Thr Trp Ala Pro
 1             5             10             15
Leu Ala Met Ala Ala Lys Val Asp Leu Ser Thr Ser Thr Asp Trp Lys
          20             25             30
Glu Ala Lys Ser Phe Leu Lys Gly Leu Ser Asp Lys Gln Arg Glu Glu
          35             40             45
His Tyr Phe Cys Lys Asp Phe Val Arg Leu Lys Lys Ile Pro Thr Trp
          50             55             60
Lys Glu Met Ala Lys Gly Val Ala Val Lys Val Glu Glu Pro Arg Tyr
 65             70             75             80
Lys Lys Asp Lys Gln Leu Asn Glu Lys Ile Ser Leu Leu Arg Ser Asp
          85             90             95
Ile Thr Lys Leu Glu Val Asp Ala Ile Val Asn Ala Ala Asn Ser Ser
          100             105             110
Pro Pro Pro Arg Ser Leu Ile Lys Asp Leu Arg Cys Gly Lys Lys Lys
          115             120             125
Lys Lys Lys Lys Lys

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546

130

<210> 589

<211> 163

<212> PRT

<213> Homo sapiens

<400> 589

Arg His Arg Gly Gln Pro Leu Arg Gln Thr Arg Ala Ser Ser Ser Pro
 1 5 10 15

Gln Leu Ala Gly Arg Ser Ser Ser Val Leu Pro Ala Ala Ala Gln Pro
 20 25 30

Cys Thr Pro Thr Met Asp Val Phe Lys Lys Gly Phe Ser Ile Ala Lys
 35 40 45

Glu Gly Val Val Gly Ala Val Glu Lys Thr Lys Gln Gly Val Thr Glu
 50 55 60

Ala Ala Glu Lys Thr Lys Glu Gly Val Met Tyr Val Gly Ala Lys Thr
 65 70 75 80

Lys Glu Asn Val Val Gln Ser Val Thr Ser Val Ala Glu Lys Thr Lys
 85 90 95

Glu Gln Ala Asn Ala Val Ser Glu Ala Val Val Ser Ser Val Asn Thr
 100 105 110

Val Ala Thr Lys Thr Val Glu Glu Ala Glu Asn Ile Ala Val Thr Ser
 115 120 125

Gly Val Val Arg Lys Glu Asp Leu Arg Pro Ser Ala Pro Gln Gln Glu
 130 135 140

Gly Glu Ala Ser Lys Glu Lys Glu Glu Val Ala Glu Glu Ala Gln Ser
 145 150 155 160

Gly Gly Asp

<210> 590

<211> 59

<212> PRT

<213> Homo sapiens

<400> 590

547

Arg Ala Leu Leu Cys Leu Gly His His Pro Leu Leu Ala Gln Gly Val
 1 5 10 15
 Pro Ala Leu Ser Asp Met Arg Leu Pro Thr Leu Leu Pro Ser Ser Pro
 20 25 30
 Trp Pro Pro Leu Ala Cys Pro Pro Val Leu Leu His Gln Pro His Cys
 35 40 45
 Pro Pro Ser Ala Pro Pro Thr Leu Trp Ser Phe
 50 55

<210> 591

<211> 116

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 591

Val His Ala Glu Ala Gly Arg Leu Cys His Gly Asp Cys Pro Arg Leu
 1 5 10 15
 Cys Arg Pro Arg Gln Arg Ser Ala Pro Val Gln Val Tyr Thr Xaa Arg
 20 25 30
 Gln Ala Ala Leu His Gly Arg Pro Gln Arg Asp Pro Cys Val Gly Gly
 35 40 45
 Pro Arg Pro Leu Arg Cys Ser Arg Asp Cys Gly Gly Gly His Gln Arg
 50 55 60
 Leu Val Met Pro Gly Thr Trp Thr Gln Ala Trp Gln Arg Arg Gln Val
 65 70 75 80
 Val Asn Gly Leu Met Leu Gly Gln Ala Arg Ile His Val Asn Arg Leu
 85 90 95
 Glu Gln Ala Val Val Asn Leu Ala Pro Cys Glu Tyr Phe His Thr Cys
 100 105 110
 Cys Pro Phe Ala
 115

548

<210> 592
 <211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (30)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (239)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 592
 Arg Arg Ser Leu Asn Thr His Gly Ser Gly Val Ser Val Cys Leu Gln
 1 5 10 15
 Ser Leu Thr Leu Leu Ala Thr Leu Cys Pro Gly Asp Gln Xaa Ser Leu
 20 25 30
 Gly Leu Leu Thr Pro Cys Tyr Ser Gly Ser Glu Pro Ser Gly Thr Phe
 35 40 45
 Gly Pro Val Asn Pro Ser Leu Asn Asn Thr Tyr Glu Phe Met Ser Thr
 50 55 60
 Phe Phe Leu Glu Val Ser Ser Val Phe Pro Asp Phe Tyr Leu His Leu
 65 70 75 80
 Gly Gly Asp Glu Val Asp Phe Thr Cys Trp Lys Ser Asn Pro Glu Ile
 85 90 95
 Gln Asp Phe Met Arg Lys Lys Gly Phe Gly Glu Asp Phe Lys Gln Leu
 100 105 110
 Glu Ser Phe Tyr Ile Gln Thr Leu Leu Asp Ile Val Ser Ser Tyr Gly
 115 120 125
 Lys Gly Tyr Val Val Trp Gln Glu Val Phe Asp Asn Lys Val Lys Ile
 130 135 140
 Gln Pro Asp Thr Ile Ile Gln Val Trp Arg Glu Asp Ile Pro Val Asn
 145 150 155 160
 Tyr Met Lys Glu Leu Glu Leu Val Thr Lys Ala Gly Phe Arg Ala Leu
 165 170 175
 Leu Ser Ala Pro Trp Tyr Leu Asn Arg Ile Ser Tyr Gly Pro Asp Trp
 180 185 190

549

Lys Asp Phe Tyr Val Val Glu Pro Leu Ala Phe Glu Gly Thr Pro Glu
 195 200 205
 Gln Lys Ala Leu Val Ile Gly Gly Glu Ala Cys Met Trp Gly Glu Tyr
 210 215 220
 Val Asp Asn Thr Asn Leu Val Pro Arg Leu Trp Pro Arg Ala Xaa Ala
 225 230 235 240
 Val Ala Glu Arg Leu Trp Ser Asn Lys Leu Thr Ser Asp Leu Thr Phe
 245 250 255
 Ala Tyr Glu Arg Leu Ser His Phe Arg Cys Glu Leu Leu Arg Arg Gly
 260 265 270
 Val Gln Ala Gln Pro Leu Asn Val Gly Phe Cys Glu Gln Glu Phe Glu
 275 280 285
 Gln Thr
 290

<210> 593

<211> 665

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 593

Asp Ala Asp Gly Arg Met Asp Xaa Leu Val Ser Glu Cys Ser Ala Arg
 1 5 10 15
 Leu Leu Gln Gln Glu Glu Glu Ile Lys Ser Leu Thr Ala Glu Ile Asp
 20 25 30
 Arg Leu Lys Asn Cys Gly Cys Leu Gly Ala Ser Pro Asn Leu Glu Gln
 35 40 45
 Leu Gln Glu Glu Asn Leu Lys Leu Lys Tyr Arg Leu Asn Ile Leu Arg
 50 55 60
 Lys Ser Leu Gln Ala Glu Arg Asn Lys Pro Thr Lys Asn Met Ile Asn
 65 70 75 80
 Ile Ile Ser Arg Leu Gln Glu Val Phe Gly His Ala Ile Lys Ala Ala

550

85										90					95				
Tyr	Pro	Asp	Leu	Glu	Asn	Pro	Pro	Leu	Leu	Val	Thr	Pro	Ser	Gln	Gln				
			100					105					110						
Ala	Lys	Phe	Gly	Asp	Tyr	Gln	Cys	Asn	Ser	Ala	Met	Gly	Ile	Ser	Gln				
		115					120					125							
Met	Leu	Lys	Thr	Lys	Glu	Gln	Lys	Val	Asn	Pro	Arg	Glu	Ile	Ala	Glu				
	130					135					140								
Asn	Ile	Thr	Lys	His	Leu	Pro	Asp	Asn	Glu	Cys	Ile	Glu	Lys	Val	Glu				
145					150					155					160				
Ile	Ala	Gly	Pro	Gly	Phe	Ile	Asn	Val	His	Leu	Arg	Lys	Asp	Phe	Val				
				165					170					175					
Ser	Glu	Gln	Leu	Thr	Ser	Leu	Leu	Val	Asn	Gly	Val	Gln	Leu	Pro	Ala				
			180					185					190						
Leu	Gly	Glu	Asn	Lys	Lys	Val	Ile	Val	Asp	Phe	Ser	Ser	Pro	Asn	Ile				
	195						200					205							
Ala	Lys	Glu	Met	His	Val	Gly	His	Leu	Arg	Ser	Thr	Ile	Ile	Gly	Glu				
	210					215					220								
Ser	Ile	Ser	Arg	Leu	Phe	Glu	Phe	Ala	Gly	Tyr	Asp	Val	Leu	Arg	Leu				
225				230					235					240					
Asn	His	Val	Gly	Asp	Trp	Gly	Thr	Gln	Phe	Gly	Met	Leu	Ile	Ala	His				
			245						250					255					
Leu	Gln	Asp	Lys	Phe	Pro	Asp	Tyr	Leu	Thr	Val	Ser	Pro	Pro	Ile	Gly				
		260						265					270						
Asp	Leu	Gln	Val	Phe	Tyr	Lys	Glu	Ser	Lys	Lys	Arg	Phe	Asp	Thr	Glu				
	275					280						285							
Glu	Glu	Phe	Lys	Lys	Arg	Ala	Tyr	Gln	Cys	Val	Val	Leu	Leu	Gln	Gly				
	290					295					300								
Lys	Asn	Pro	Asp	Ile	Thr	Lys	Ala	Trp	Lys	Leu	Ile	Cys	Asp	Val	Ser				
305				310						315				320					
Arg	Gln	Glu	Leu	Asn	Lys	Ile	Tyr	Asp	Ala	Leu	Asp	Val	Ser	Leu	Ile				
			325						330					335					
Glu	Arg	Gly	Glu	Ser	Phe	Tyr	Gln	Asp	Arg	Met	Asn	Asp	Ile	Val	Lys				
		340						345					350						
Glu	Phe	Glu	Asp	Arg	Gly	Phe	Val	Gln	Val	Asp	Asp	Gly	Arg	Lys	Ile				

551

355	360	365
Val Phe Val Pro Gly Cys Ser Ile Pro Leu Thr Ile Val Lys Ser Asp		
370	375	380
Gly Gly Tyr Thr Tyr Asp Thr Ser Asp Leu Ala Ala Ile Lys Gln Arg		
385	390	395 400
Leu Phe Glu Glu Lys Ala Asp Met Ile Ile Tyr Val Val Asp Asn Gly		
	405	410 415
Gln Ser Val His Phe Gln Thr Ile Phe Ala Ala Ala Gln Met Ile Gly		
	420	425 430
Trp Tyr Asp Pro Lys Val Thr Arg Val Phe His Ala Gly Phe Gly Val		
	435	440 445
Val Leu Gly Glu Asp Lys Lys Lys Phe Lys Thr Arg Ser Gly Glu Thr		
	450	455 460
Val Arg Leu Met Asp Leu Leu Gly Glu Gly Leu Lys Arg Ser Met Asp		
	465	470 475 480
Lys Leu Lys Glu Lys Glu Arg Asp Lys Val Leu Thr Ala Glu Glu Leu		
	485	490 495
Asn Ala Ala Gln Thr Ser Val Ala Tyr Gly Cys Ile Lys Tyr Ala Asp		
	500	505 510
Leu Ser His Asn Arg Leu Asn Asp Tyr Ile Phe Ser Phe Asp Lys Met		
	515	520 525
Leu Asp Asp Arg Gly Asn Thr Ala Ala Tyr Leu Leu Tyr Ala Phe Thr		
	530	535 540
Arg Ile Arg Ser Ile Ala Arg Leu Ala Asn Ile Asp Glu Glu Met Leu		
	545	550 555 560
Gln Lys Ala Ala Arg Glu Thr Lys Ile Leu Leu Asp His Glu Lys Glu		
	565	570 575
Trp Lys Leu Gly Arg Cys Ile Leu Arg Phe Pro Glu Ile Leu Gln Lys		
	580	585 590
Ile Leu Asp Asp Leu Phe Leu His Thr Leu Cys Asp Tyr Ile Tyr Glu		
	595	600 605
Leu Ala Thr Ala Phe Thr Glu Phe Tyr Asp Ser Cys Tyr Cys Val Glu		
	610	615 620
Lys Asp Arg Gln Thr Gly Lys Ile Leu Lys Val Asn Met Trp Arg Met		

552

625 630 635 640
 Leu Leu Cys Glu Ala Val Ala Ala Val Met Ala Lys Gly Phe Asp Ile
 645 650 655
 Leu Gly Ile Lys Pro Val Gln Arg Met
 660 665

<210> 594

<211> 116

<212> PRT

<213> Homo sapiens

<400> 594

Thr Val Thr Glu Thr Thr Val Thr Thr Glu Pro Glu Asn Arg
 1 5 10 15
 Ser Leu Thr Ile Lys Leu Arg Lys Arg Lys Pro Glu Lys Lys Val Glu
 20 25 30
 Trp Thr Ser Asp Thr Val Asp Asn Glu His Met Gly Arg Arg Ser Ser
 35 40 45
 Lys Cys Cys Cys Ile Tyr Glu Lys Pro Arg Ala Phe Gly Glu Ser Ser
 50 55 60
 Thr Glu Ser Asp Glu Glu Glu Glu Gly Cys Gly His Thr His Cys
 65 70 75 80
 Val Arg Gly His Arg Lys Gly Arg Arg Arg Ala Thr Leu Gly Pro Thr
 85 90 95
 Pro Thr Thr Pro Pro Gln Pro Pro Asp Pro Ser Gln Pro Pro Pro Gly
 100 105 110
 Pro Met Gln His
 115

<210> 595

<211> 294

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (269)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (278)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 595

Thr	Gln	Leu	Arg	Val	Ser	Glu	Arg	Glu	Gly	Pro	Gly	Asp	Pro	Gln	Arg
1				5					10					15	

Phe	Ser	Asp	His	Thr	Leu	Arg	Thr	Pro	Arg	Leu	Glu	Asp	Arg	Pro	Gly
			20					25					30		

Asp	Ala	Met	Trp	Gly	Glu	Gly	Leu	Arg	Ala	Trp	Cys	Arg	Phe	Val	Glu
		35					40					45			

Asn	Arg	Trp	Cys	Leu	Lys	Arg	Val	Ser	Ala	Pro	Leu	His	Leu	Gly	Leu
	50					55					60				

Leu	Gly	Cys	Pro	Asp	Ala	Glu	Ala	His	Phe	Pro	Ala	Met	Leu	Thr	Leu
65					70					75					80

Pro	Leu	Ser	Pro	Pro	Ser	Arg	Lys	Met	Ala	Thr	Asn	Phe	Leu	Ala	His
				85					90					95	

Glu	Lys	Ile	Trp	Phe	Asp	Lys	Phe	Lys	Tyr	Asp	Asp	Ala	Glu	Arg	Arg
		100						105					110		

Phe	Tyr	Glu	Gln	Met	Asn	Gly	Pro	Val	Ala	Gly	Ala	Ser	Arg	Gln	Glu
	115						120					125			

Asn	Gly	Ala	Ser	Val	Ile	Leu	Arg	Asp	Ile	Ala	Arg	Ala	Arg	Glu	Asn
	130					135				140					

Ile	Gln	Lys	Ser	Leu	Ala	Gly	Ser	Ser	Gly	Pro	Gly	Ala	Ser	Ser	Gly
145				150						155					160

Thr	Ser	Gly	Asp	His	Gly	Glu	Leu	Val	Val	Arg	Ile	Ala	Ser	Leu	Glu
				165					170					175	

Val	Glu	Asn	Gln	Ser	Leu	Arg	Gly	Val	Val	Gln	Glu	Leu	Gln	Gln	Ala
		180						185					190		

Ile	Ser	Lys	Leu	Glu	Ala	Arg	Leu	Asn	Val	Leu	Glu	Lys	Ser	Ser	Pro
		195					200					205			

Gly	His	Arg	Ala	Thr	Ala	Pro	Gln	Thr	Gln	His	Val	Ser	Pro	Met	Arg
	210					215					220				

Gln	Val	Glu	Pro	Pro	Ala	Lys	Lys	Pro	Ala	Thr	Pro	Ala	Glu	Asp	Asp
225					230					235					240

554

Glu Asp Asp Asp Ile Asp Leu Phe Gly Ser Asp Asn Glu Glu Glu Asp
 245 250 255
 Lys Glu Ala Ala Gln Leu Arg Glu Glu Arg Leu Arg Xaa Tyr Ala Glu
 260 265 270
 Lys Lys Ala Lys Lys Xaa Ala Leu Val Ala Lys Ser Ser Ile Leu Leu
 275 280 285
 Asp Phe Lys Pro Trp Gly
 290

<210> 596
 <211> 134
 <212> PRT
 <213> Homo sapiens

<400> 596
 Val Ser Arg Leu Gly Leu Leu Thr Pro Leu Gly Cys Ser Phe Gly Thr
 1 5 10 15
 Asp Glu Trp Leu Cys Pro Val Thr Ala Leu Ser Leu Pro Gly Gly Tyr
 20 25 30
 Val His Ser Arg Pro Leu Pro Arg Leu Arg Pro Met Arg Tyr Gly Asp
 35 40 45
 Thr Leu Ala Pro Arg Ser Trp Arg His Arg Pro Leu Pro Trp His Ser
 50 55 60
 Ser Phe Ala Gly Asp Pro Pro Leu Pro Lys Ala Leu Ser Pro Cys Ser
 65 70 75 80
 His Ser Arg Arg Thr Ala Ala Arg Ala Ser Gly Ser Leu Ala Thr Gly
 85 90 95
 Phe Glu Arg Leu His Ser Trp Gly Leu Glu Gly Gly Val Pro Lys Ala
 100 105 110
 Leu Ser Lys Ser Gln Ser Ser Ser His Gln Ser Leu Tyr Lys Val Leu
 115 120 125
 Gly Pro Glu Ala Leu Pro
 130

<210> 597

555

<211> 91

<212> PRT

<213> Homo sapiens

<400> 597

Glu Gly Pro Glu Gly Ala Asn Leu Phe Ile Tyr His Leu Pro Gln Glu
1 5 10 15

Phe Gly Asp Gln Asp Ile Leu Gln Met Phe Met Pro Phe Gly Asn Val
20 25 30

Ile Ser Ala Lys Val Phe Ile Asp Lys Gln Thr Asn Leu Ser Lys Cys
35 40 45

Phe Gly Phe Val Ser Tyr Asp Asn Pro Val Ser Ala Gln Ala Ala Ile
50 55 60

Gln Ala Met Asn Gly Phe Gln Ile Gly Met Lys Arg Leu Lys Val Gln
65 70 75 80

Leu Lys Arg Ser Lys Asn Asp Ser Lys Pro Tyr
85 90

<210> 598

<211> 68

<212> PRT

<213> Homo sapiens

<400> 598

Arg Pro Thr Arg Pro Glu Lys Val Gly Ser Gly Gly Ser Ser Val Gly
1 5 10 15

Ser Gly Asp Ala Ser Ser Ser Arg His His Arg Arg Arg Arg Phe
20 25 30

His Leu Pro Gln Gln Pro Leu Leu Gln Arg Glu Val Trp Cys Val Gly
35 40 45

Thr Thr Gly Asn Ala Asn Gln Ala Gln Ser Ser Thr Glu Gln Thr Leu
50 55 60

Leu Lys Pro Lys
65

<210> 599

<211> 119

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

$\langle 220 \rangle$

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

$\langle 220 \rangle$

<221> SITE

<222> (88)

<223> Xaa equals any of the naturally occurring L-amino acids

 $\langle 220 \rangle$

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

$\langle 220 \rangle$

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 599

Phe Gly Arg Asp Gln Val Tyr Leu Ser Tyr Asn Asn Val Ser Ser Leu
1 5 10 15

Lys Met Leu Val Ala Lys Asp Asn Trp Val Leu Ser Ser Glu Ile Ser
20 25 30

Gln Val Arg Leu Tyr Thr Leu Glu Asp Asp Lys Phe Leu Ser Phe His
35 40 45

Met Glu Met Val Val His Val Asp Ala Xaa Gln Ala Phe Leu Leu Leu
50 55 60

Ser	Asp	Leu	Xaa	Gln	Arg	Pro	Glu	Trp	Asp	Lys	His	Tyr	Arg	Ser	Val
65					70					75					80

Glu Leu Val Gln Gln Val Asp Xaa Gly Arg Arg His Leu Pro Arg His
85 90 95

Gln Xaa Xaa Pro Arg Arg Ser His Lys Ala Pro Gly Leu Arg Asp Pro
100 105 110

Gly Leu Glu Ala Glu Ala Leu
115

<210> 600
 <211> 177
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (8)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (69)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (135)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 600
 Xaa Glu Arg Leu Arg Ala Gln Xaa Glu Lys Ser Arg Asp Ser Gln Pro
 1 5 10 15
 Arg Leu Pro Leu Arg Phe Pro Ser Trp Arg Gly Pro Trp Cys Gly Ile
 20 25 30
 Glu Ile Ala Gly Tyr Gly Ala Glu Val Phe Arg Gln Tyr Trp Asp Ile
 35 40 45
 Pro Asp Gly Thr Asp Cys His Arg Lys Ala Tyr Ser Thr Thr Ser Ile
 50 55 60
 Ala Ser Val Ala Xaa Leu Thr Ala Ala Ala Tyr Arg Val Thr Leu Asn
 65 70 75 80
 Pro Pro Gly Thr Phe Leu Glu Gly Val Ala Lys Val Gly Gln Tyr Thr
 85 90 95
 Phe Thr Ala Ala Ala Val Gly Ala Val Phe Gly Leu Thr Thr Cys Ile
 100 105 110
 Ser Ala His Val Arg Glu Lys Pro Asp Asp Pro Leu Asn Tyr Phe Leu

558

115 120 125
 Gly Gly Cys Ala Gly Gly Xaa Thr Leu Gly Ala Arg Thr His Asn Tyr
 130 135 140
 Gly Ile Gly Ala Ala Ala Cys Val Tyr Phe Gly Ile Ala Ala Ser Leu
 145 150 155 160
 Val Lys Met Gly Arg Leu Glu Gly Trp Glu Val Phe Ala Lys Pro Lys
 165 170 175
 Val

<210> 601
 <211> 218
 <212> PRT
 <213> Homo sapiens

<400> 601
 Arg Gly Gly Gly Gly Gly Ala Ser Ser Cys Cys Cys Cys Ala Pro Ser
 1 5 10 15
 Pro Arg Gly Arg Pro Val Pro Ala Arg Thr Pro Arg Arg Cys Pro Arg
 20 25 30
 Pro Ser Pro Gly Pro Ala Met Gly Leu Thr Val Ser Ala Leu Phe Ser
 35 40 45
 Arg Ile Phe Gly Lys Lys Gln Met Arg Ile Leu Met Val Gly Leu Asp
 50 55 60
 Ala Ala Gly Lys Thr Thr Ile Leu Tyr Lys Leu Lys Leu Gly Glu Ile
 65 70 75 80
 Val Thr Thr Ile Pro Thr Ile Gly Phe Asn Val Glu Thr Val Glu Tyr
 85 90 95
 Lys Asn Ile Cys Phe Thr Val Trp Asp Val Gly Gly Gln Asp Lys Ile
 100 105 110
 Arg Pro Leu Trp Arg His Tyr Phe Gln Asn Thr Gln Gly Leu Ile Phe
 115 120 125
 Val Val Asp Ser Asn Asp Arg Glu Arg Val Gln Glu Ser Ala Asp Glu
 130 135 140
 Leu Gln Lys Met Leu Gln Glu Asp Glu Leu Arg Asp Ala Val Leu Leu
 145 150 155 160

559

Val	Phe	Ala	Asn	Lys	Gln	Asp	Met	Pro	Asn	Ala	Met	Pro	Val	Ser	Glu
				165					170					175	
Leu	Thr	Asp	Lys	Leu	Gly	Leu	Gln	His	Leu	Arg	Ser	Arg	Thr	Trp	Tyr
			180					185					190		
Val	Gln	Ala	Thr	Cys	Ala	Thr	Gln	Gly	Thr	Gly	Leu	Tyr	Asp	Gly	Leu
		195					200					205			
Asp	Trp	Leu	Ser	His	Glu	Leu	Ser	Lys	Arg						
	210						215								

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<210> 602
<211> 829
<212> PRT
<213> Homo sapiens
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<220>
<221> SITE
<222> (32)
<223> Xaa equals any of the naturally occurring L-amino acids
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<220>
<221> SITE
<222> (454)
<223> Xaa equals any of the naturally occurring L-amino acids
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<400> 602
Pro Gly Gln Ala Gly Ala Glu Gly His Val Arg Cys Cys Pro Gly Glu
  1                               5                10                15

Glu Gln Lys Ala Gly Gly Glu Arg Arg Cys Pro Gly Pro Gln Arg Xaa
                20                25                30

Gly Ala Ala Leu Gly Pro Gly Pro Gly Glu Ala Arg Leu Asp Tyr Ser
          35                40                45

Glu Phe Phe Thr Glu Asp Val Gly Gln Leu Pro Gly Leu Thr Ile Trp
  50                55                60

Gln Ile Glu Asn Phe Val Pro Val Leu Val Glu Glu Ala Phe His Gly
  65                70                75                80

Lys Phe Tyr Glu Ala Asp Cys Tyr Ile Val Leu Lys Thr Phe Leu Asp
          85                90                95

Asp Ser Gly Ser Leu Asn Trp Glu Ile Tyr Tyr Trp Ile Gly Gly Glu
          100                105                110

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560

Ala	Thr	Leu	Asp	Lys	Lys	Ala	Cys	Ser	Ala	Ile	His	Ala	Val	Asn	Leu	115	120	125
Arg	Asn	Tyr	Leu	Gly	Ala	Glu	Cys	Arg	Thr	Val	Arg	Glu	Glu	Met	Gly	130	135	140
Asp	Glu	Ser	Glu	Glu	Phe	Leu	Gln	Val	Phe	Asp	Asn	Asp	Ile	Ser	Tyr	145	150	155
Ile	Glu	Gly	Gly	Thr	Ala	Ser	Gly	Phe	Tyr	Thr	Val	Glu	Asp	Thr	His	165	170	175
Tyr	Val	Thr	Arg	Met	Tyr	Arg	Val	Tyr	Gly	Lys	Lys	Asn	Ile	Lys	Leu	180	185	190
Glu	Pro	Val	Pro	Leu	Lys	Gly	Thr	Ser	Leu	Asp	Pro	Arg	Phe	Val	Phe	195	200	205
Leu	Leu	Asp	Arg	Gly	Leu	Asp	Ile	Tyr	Val	Trp	Arg	Gly	Ala	Gln	Ala	210	215	220
Thr	Leu	Ser	Ser	Thr	Thr	Lys	Ala	Arg	Leu	Phe	Ala	Glu	Lys	Ile	Asn	225	230	235
Lys	Asn	Glu	Arg	Lys	Gly	Lys	Ala	Glu	Ile	Thr	Leu	Leu	Val	Gln	Gly	245	250	255
Gln	Glu	Leu	Pro	Glu	Phe	Trp	Glu	Ala	Leu	Gly	Gly	Glu	Pro	Ser	Glu	260	265	270
Ile	Lys	Lys	His	Val	Pro	Glu	Asp	Phe	Trp	Pro	Pro	Gln	Pro	Lys	Leu	275	280	285
Tyr	Lys	Val	Gly	Leu	Gly	Leu	Gly	Tyr	Leu	Glu	Leu	Pro	Gln	Ile	Asn	290	295	300
Tyr	Lys	Leu	Ser	Val	Glu	His	Lys	Gln	Arg	Pro	Lys	Val	Glu	Leu	Met	305	310	315
Pro	Arg	Met	Arg	Leu	Leu	Gln	Ser	Leu	Leu	Asp	Thr	Arg	Cys	Val	Asn	325	330	335
Ile	Leu	Asp	Cys	Trp	Ser	Asp	Val	Phe	Ile	Trp	Leu	Gly	Arg	Lys	Ser	340	345	350
Pro	Arg	Leu	Val	Arg	Ala	Ala	Ala	Leu	Lys	Leu	Gly	Gln	Glu	Leu	Cys	355	360	365
Gly	Met	Leu	His	Arg	Pro	Arg	His	Ala	Thr	Val	Ser	Arg	Ser	Leu	Glu	370	375	380

Gly	Thr	Glu	Ala	Gln	Val	Phe	Lys	Ala	Lys	Phe	Lys	Asn	Trp	Asp	Asp		
385					390					395					400		
Val	Leu	Thr	Val	Asp	Tyr	Thr	Arg	Asn	Ala	Glu	Ala	Val	Leu	Gln	Ser		
				405					410					415			
Pro	Gly	Leu	Ser	Gly	Lys	Val	Lys	Arg	Asp	Ala	Glu	Lys	Lys	Asp	Gln		
			420					425						430			
Met	Lys	Ala	Asp	Leu	Thr	Ala	Leu	Phe	Leu	Pro	Arg	Gln	Pro	Pro	Met		
		435					440					445					
Ser	Leu	Ala	Glu	Ala	Xaa	Gln	Leu	Met	Glu	Glu	Trp	Asn	Glu	Asp	Leu		
	450					455					460						
Asp	Gly	Met	Glu	Gly	Phe	Val	Leu	Glu	Gly	Lys	Lys	Phe	Ala	Arg	Leu		
465					470				475						480		
Pro	Glu	Glu	Glu	Phe	Gly	His	Phe	Tyr	Thr	Gln	Asp	Cys	Tyr	Val	Phe		
				485					490					495			
Leu	Cys	Arg	Tyr	Trp	Val	Pro	Val	Glu	Tyr	Glu	Glu	Glu	Glu	Lys	Lys		
			500					505					510				
Glu	Asp	Lys	Glu	Glu	Lys	Ala	Glu	Gly	Lys	Glu	Gly	Glu	Glu	Ala	Thr		
		515					520					525					
Ala	Glu	Ala	Glu	Glu	Lys	Gln	Pro	Glu	Glu	Asp	Phe	Gln	Cys	Ile	Val		
	530					535					540						
Tyr	Phe	Trp	Gln	Gly	Arg	Glu	Ala	Ser	Asn	Met	Gly	Trp	Leu	Thr	Phe		
545					550					555					560		
Thr	Phe	Ser	Leu	Gln	Lys	Lys	Phe	Glu	Ser	Leu	Phe	Pro	Gly	Lys	Leu		
			565					570						575			
Glu	Val	Val	Arg	Met	Thr	Gln	Gln	Gln	Glu	Asn	Pro	Lys	Phe	Leu	Ser		
			580					585					590				
His	Phe	Lys	Arg	Lys	Phe	Ile	Ile	His	Arg	Gly	Lys	Arg	Lys	Ala	Val		
		595					600					605					
Gln	Gly	Ala	Gln	Gln	Pro	Ser	Leu	Tyr	Gln	Ile	Arg	Thr	Asn	Gly	Ser		
	610					615					620						
Ala	Leu	Cys	Thr	Arg	Cys	Ile	Gln	Ile	Asn	Thr	Asp	Ser	Ser	Leu	Leu		
625					630				635					640			
Asn	Ser	Glu	Phe	Cys	Phe	Ile	Leu	Lys	Val	Pro	Phe	Glu	Ser	Glu	Asp		
			645					650						655			

562

Asn Gln Gly Ile Val Tyr Ala Trp Val Gly Arg Ala Ser Asp Pro Asp
 660 665 670
 Glu Ala Lys Leu Ala Glu Asp Ile Leu Asn Thr Met Phe Asp Thr Ser
 675 680 685
 Tyr Ser Lys Gln Val Ile Asn Glu Gly Glu Glu Pro Glu Asn Phe Phe
 690 695 700
 Trp Val Gly Ile Gly Ala Gln Lys Pro Tyr Asp Asp Asp Ala Glu Tyr
 705 710 715 720
 Met Lys His Thr Arg Leu Phe Arg Cys Ser Asn Glu Lys Gly Tyr Phe
 725 730 735
 Ala Val Thr Glu Lys Cys Ser Asp Phe Cys Gln Asp Asp Leu Ala Asp
 740 745 750
 Asp Asp Ile Met Leu Leu Asp Asn Gly Gln Glu Val Tyr Met Trp Val
 755 760 765
 Gly Thr Gln Thr Ser Gln Val Glu Ile Lys Leu Ser Leu Lys Ala Cys
 770 775 780
 Gln Val Tyr Ile Gln His Met Arg Ser Lys Glu His Glu Arg Pro Arg
 785 790 795 800
 Arg Leu Arg Leu Val Arg Lys Gly Asn Glu Gln His Ala Phe Thr Arg
 805 810 815
 Cys Phe His Ala Trp Ser Ala Phe Cys Lys Ala Leu Ala
 820 825

<210> 603

<211> 221

<212> PRT

<213> Homo sapiens

<400> 603

Thr Glu Pro Pro Leu Ser Cys Cys Leu Pro Ala Thr Tyr Pro Ala Asp
 1 5 10 15
 Met Gly Thr Ala Gly Ala Met Gln Leu Cys Trp Val Ile Leu Gly Phe
 20 25 30
 Leu Leu Phe Arg Gly His Asn Ser Gln Pro Thr Met Thr Gln Thr Ser
 35 40 45

563

Ser Ser Gln Gly Gly Leu Gly Gly Leu Ser Leu Thr Thr Glu Pro Val
 50 55 60
 Ser Ser Asn Pro Gly Tyr Ile Pro Ser Ser Glu Ala Asn Arg Pro Ser
 65 70 75 80
 His Leu Ser Ser Thr Gly Thr Pro Gly Ala Gly Val Pro Ser Ser Gly
 85 90 95
 Arg Asp Gly Gly Thr Ser Arg Asp Thr Phe Gln Thr Val Pro Pro Asn
 100 105 110
 Ser Thr Thr Met Ser Leu Ser Met Arg Glu Asp Ala Thr Ile Leu Pro
 115 120 125
 Ser Pro Thr Ser Glu Thr Val Leu Thr Val Ala Ala Phe Gly Val Ile
 130 135 140
 Ser Phe Ile Val Ile Leu Val Val Val Val Ile Ile Leu Val Gly Val
 145 150 155 160
 Val Ser Leu Arg Phe Lys Cys Arg Lys Ser Lys Glu Ser Glu Asp Pro
 165 170 175
 Gln Lys Pro Gly Ser Ser Gly Leu Ser Glu Ser Cys Ser Thr Ala Asn
 180 185 190
 Gly Glu Lys Asp Ser Ile Thr Leu Ile Ser Met Lys Asn Ile Asn Met
 195 200 205
 Asn Asn Gly Lys Gln Ser Leu Ser Ala Glu Lys Val Leu
 210 215 220

<210> 604

<211> 97

<212> PRT

<213> Homo sapiens

<400> 604

Ser Cys Gly Leu Ser Leu Ile Lys Met Thr Thr Ser Gln Lys His Arg
 1 5 10 15
 Asp Phe Val Ala Glu Pro Met Gly Glu Lys Pro Val Gly Ser Leu Ala
 20 25 30
 Gly Ile Gly Glu Val Leu Gly Lys Lys Leu Glu Glu Arg Gly Phe Asp
 35 40 45
 Lys Ala Tyr Val Val Leu Gly Gln Phe Leu Val Leu Lys Lys Asp Glu

564

50 55 60
 Asp Leu Phe Arg Glu Trp Leu Lys Asp Thr Cys Gly Ala Asn Ala Lys
 65 70 75 80
 Gln Ser Arg Asp Cys Phe Gly Cys Leu Arg Glu Trp Cys Asp Ala Phe
 85 90 95

Leu

<210> 605

<211> 266

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 605

Gly Pro Arg Arg Leu Gly Ala Leu His Ala Ala Ala Thr Gly Ala Arg
 1 5 10 15

Cys Leu Val Glu Leu Leu Val Ala His Gly Ala Asp Leu Asn Ala Lys
 20 25 30

Ser Leu Met Asp Glu Thr Pro Leu Asp Val Cys Gly Asp Glu Glu Val
 35 40 45

Arg Ala Lys Leu Leu Glu Leu Lys His Lys His Asp Ala Leu Leu Arg
 50 55 60

Ala Gln Ser Arg Gln Arg Ser Leu Leu Arg Arg Arg Thr Ser Ser Ala
 65 70 75 80

Gly Ser Arg Xaa Lys Val Val Arg Arg Val Ser Leu Thr Gln Arg Thr
 85 90 95

Asp Leu Tyr Arg Lys Gln His Ala Gln Glu Ala Ile Val Trp Gln Gln
 100 105 110

Pro Pro Pro Thr Ser Pro Glu Pro Pro Glu Asp Asn Asp Asp Arg Gln
 115 120 125

Thr Gly Ala Glu Leu Arg Pro Pro Pro Pro Glu Glu Asp Asn Pro Glu
 130 135 140

565

Val Val Arg Pro His Asn Gly Arg Val Gly Gly Ser Pro Val Arg His
 145 150 155 160
 Leu Tyr Ser Lys Arg Leu Asp Arg Ser Val Ser Tyr Gln Leu Ser Pro
 165 170 175
 Leu Asp Ser Thr Thr Pro His Thr Leu Val His Asp Lys Ala His His
 180 185 190
 Thr Leu Ala Asp Leu Lys Arg Gln Arg Ala Ala Ala Lys Leu Gln Arg
 195 200 205
 Pro Pro Pro Glu Gly Pro Glu Ser Pro Glu Thr Ala Glu Pro Gly Leu
 210 215 220
 Pro Gly Asp Thr Val Thr Pro Gln Pro Asp Cys Gly Phe Arg Ala Gly
 225 230 235 240
 Gly Asp Pro Pro Leu Leu Lys Leu Thr Ala Pro Ala Val Glu Ala Pro
 245 250 255
 Val Glu Arg Arg Pro Cys Cys Leu Leu Met
 260 265

<210> 606

<211> 331

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (285)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 606

His Asp Ser Cys Phe Val Glu Met Gln Ala Gln Lys Val Met His Val
 1 5 10 15

Ser Ser Ala Glu Leu Asn Tyr Ser Leu Pro Tyr Asp Ser Lys His Gln
 20 25 30

Ile Arg Asn Ala Ser Asn Val Lys His His Asp Ser Ser Ala Leu Gly
 35 40 45

566

Val	Tyr	Ser	Tyr	Ile	Pro	Leu	Val	Glu	Asn	Pro	Tyr	Phe	Ser	Ser	Trp
50						55					60				
Pro	Pro	Ser	Gly	Thr	Ser	Ser	Lys	Met	Ser	Leu	Asp	Leu	Pro	Glu	Lys
65					70					75					80
Gln	Asp	Gly	Thr	Val	Phe	Pro	Ser	Ser	Leu	Xaa	Pro	Thr	Ser	Ser	Thr
				85					90					95	
Ser	Leu	Phe	Ser	Tyr	Tyr	Asn	Ser	His	Asp	Ser	Leu	Ser	Leu	Asn	Ser
			100					105						110	
Pro	Thr	Asn	Ile	Ser	Ser	Leu	Leu	Asn	Gln	Glu	Ser	Ala	Val	Leu	Ala
		115					120						125		
Thr	Ala	Pro	Arg	Ile	Asp	Asp	Glu	Ile	Pro	Pro	Pro	Leu	Pro	Val	Arg
	130					135						140			
Thr	Pro	Glu	Ser	Phe	Ile	Val	Val	Glu	Glu	Ala	Gly	Glu	Phe	Ser	Pro
145					150					155					160
Asn	Val	Pro	Lys	Ser	Leu	Ser	Ser	Ala	Val	Lys	Val	Lys	Ile	Gly	Thr
				165					170					175	
Ser	Leu	Glu	Trp	Gly	Gly	Thr	Ser	Glu	Pro	Lys	Lys	Phe	Asp	Asp	Ser
			180					185						190	
Val	Ile	Leu	Arg	Pro	Ser	Lys	Ser	Val	Lys	Leu	Arg	Ser	Pro	Lys	Ser
		195					200						205		
Glu	Leu	His	Gln	Asp	Arg	Ser	Ser	Pro	Pro	Pro	Pro	Leu	Pro	Glu	Arg
	210					215						220			
Thr	Leu	Glu	Ser	Phe	Phe	Leu	Ala	Asp	Glu	Asp	Cys	Met	Gln	Ala	Gln
225					230					235					240
Ser	Ile	Glu	Thr	Tyr	Ser	Thr	Ser	Tyr	Pro	Asp	Thr	Met	Glu	Asn	Ser
				245					250					255	
Thr	Ser	Ser	Lys	Gln	Thr	Leu	Lys	Thr	Pro	Gly	Lys	Ser	Phe	Thr	Arg
			260					265						270	
Ser	Lys	Ser	Leu	Lys	Ile	Leu	Arg	Asn	Met	Lys	Lys	Xaa	Ile	Cys	Asn
		275					280						285		
Ser	Cys	Pro	Pro	Asn	Lys	Pro	Ala	Glu	Ser	Val	Gln	Ser	Asn	Asn	Ser
	290					295					300				
Ser	Ser	Phe	Leu	Asn	Phe	Gly	Phe	Ala	Asn	Arg	Phe	Ser	Lys	Pro	Lys
305					310					315					320

567

Gly Pro Arg Asn Pro Pro Pro Thr Trp Asn Ile
325 330

<210> 607

<211> 192

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

<222> (78)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 607

Ala Ala Pro Ser Glu Pro Lys Ala Arg Gly Gly His Gly Gly Ala Leu
1 5 10 15

Ala Arg Leu Glu Thr Met Pro Lys Leu Gln Gly Phe Glu Phe Trp Ser
20 25 30

Arg Thr Leu Arg Gly Ala Arg His Val Val Ala Pro Met Val Asp Gln
35 40 45

Ser Glu Leu Ala Trp Arg Leu Leu Ser Arg Arg His Gly Ala Gln Leu
50 55 60

Cys Tyr Thr Pro Met Leu His Ala Gln Val Phe Val Arg Xaa Ala Asn
65 70 75 80

Tyr Arg Lys Glu Asn Leu Tyr Cys Glu Val Cys Pro Glu Asp Arg Pro
85 90 95

Leu Ile Val Gln Phe Cys Ala Asn Asp Pro Glu Val Phe Val Gln Ala
100 105 110

Ala Leu Leu Ala Gln Asp Tyr Cys Asp Ala Ile Asp Leu Asn Leu Gly
115 120 125

Cys Pro Gln Met Ile Ala Lys Arg Gly His Tyr Gly Ala Phe Leu Gln
130 135 140

Asp Glu Trp Asp Leu Leu Gln Arg Met Ile Leu Leu Ala His Glu Lys
145 150 155 160

Leu Ser Val Pro Val Thr Cys Lys Ile Arg Val Phe Pro Glu Ile Asp
165 170 175

Lys Thr Val Ser Thr Pro Arg Cys Trp Arg Arg Pro Ala Ala Ser Cys
180 185 190

<210> 608

<211> 415

<212> PRT

<213> Homo sapiens

<400> 608

His	Ile	Lys	Cys	Pro	His	Ser	Lys	Tyr	Gly	Cys	Thr	Phe	Ile	Gly	Asn
1				5					10					15	

Gln	Asp	Thr	Tyr	Glu	Thr	His	Leu	Glu	Thr	Cys	Arg	Phe	Glu	Gly	Leu
		20						25					30		

Lys	Glu	Phe	Leu	Gln	Gln	Thr	Asp	Asp	Arg	Phe	His	Glu	Met	His	Val
		35					40					45			

Ala	Leu	Ala	Gln	Lys	Asp	Gln	Glu	Ile	Ala	Phe	Leu	Arg	Ser	Met	Leu
	50					55					60				

Gly	Lys	Leu	Ser	Glu	Lys	Ile	Asp	Gln	Leu	Glu	Lys	Ser	Leu	Glu	Leu
65					70					75					80

Lys	Phe	Asp	Val	Leu	Asp	Glu	Asn	Gln	Ser	Lys	Leu	Ser	Glu	Asp	Leu
			85						90					95	

Met	Glu	Phe	Arg	Arg	Asp	Ala	Ser	Met	Leu	Asn	Asp	Glu	Leu	Ser	His
		100						105				110			

Ile	Asn	Ala	Arg	Leu	Asn	Met	Gly	Ile	Leu	Gly	Ser	Tyr	Asp	Pro	Gln
	115						120					125			

Gln	Ile	Phe	Lys	Cys	Lys	Gly	Thr	Phe	Val	Gly	His	Gln	Gly	Pro	Val
	130					135					140				

Trp	Cys	Leu	Cys	Val	Tyr	Ser	Met	Gly	Asp	Leu	Leu	Phe	Ser	Gly	Ser
145					150					155				160	

Ser	Asp	Lys	Thr	Ile	Lys	Val	Trp	Asp	Thr	Cys	Thr	Thr	Tyr	Lys	Cys
			165						170					175	

Gln	Lys	Thr	Leu	Glu	Gly	His	Asp	Gly	Ile	Val	Leu	Ala	Leu	Cys	Ile
		180						185					190		

Gln	Gly	Cys	Lys	Leu	Tyr	Ser	Gly	Ser	Ala	Asp	Cys	Thr	Ile	Ile	Val
	195						200					205			

569

Trp Asp Ile Gln Asn Leu Gln Lys Val Asn Thr Ile Arg Ala His Asp
 210 215 220
 Asn Pro Val Cys Thr Leu Val Ser Ser His Asn Val Leu Phe Ser Gly
 225 230 235 240
 Ser Leu Lys Ala Ile Lys Val Trp Asp Ile Val Gly Thr Glu Leu Lys
 245 250 255
 Leu Lys Lys Glu Leu Thr Gly Leu Asn His Trp Val Arg Ala Leu Val
 260 265 270
 Ala Ala Gln Ser Tyr Leu Tyr Ser Gly Ser Tyr Gln Thr Ile Lys Ile
 275 280 285
 Trp Asp Ile Arg Thr Leu Asp Cys Ile His Val Leu Gln Thr Ser Gly
 290 295 300
 Gly Ser Val Tyr Ser Ile Ala Val Thr Asn His His Ile Val Cys Gly
 305 310 315 320
 Thr Tyr Glu Asn Leu Ile His Val Trp Asp Ile Glu Ser Lys Glu Gln
 325 330 335
 Val Arg Thr Leu Thr Gly His Val Gly Thr Val Tyr Ala Leu Ala Val
 340 345 350
 Ile Ser Thr Pro Asp Gln Thr Lys Val Phe Ser Ala Ser Tyr Asp Arg
 355 360 365
 Ser Leu Arg Val Trp Ser Met Asp Asn Met Ile Cys Thr Gln Thr Leu
 370 375 380
 Leu Arg His Gln Gly Ser Val Thr Ala Leu Ala Val Ser Arg Gly Arg
 385 390 395 400
 Leu Phe Ser Gly Ala Val Asp Ser Thr Val Lys Val Trp Thr Cys
 405 410 415

<210> 609

<211> 48

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

570

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 609

Phe	Ser	Glu	Leu	Asn	Gln	Cys	Phe	Tyr	Ile	Cys	Phe	Phe	Phe	Tyr	Ala
1				5					10					15	

Ser	Trp	Lys	Trp	Arg	Met	Lys	Ile	Gln	Leu	Xaa	Cys	Ser	Asn	Ser	Arg
			20					25					30		

Arg	Xaa	Val	Ser	Thr	Glu	Lys	Gly	Thr	Cys	Phe	Phe	Thr	Pro	Glu	Leu
		35					40						45		

<210> 610

<211> 241

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 610

571

Xaa Asp Xaa Gly Arg Pro Xaa Arg Thr Ala Glu Ser Xaa Phe Gly Ile
 1 5 10 15
 Asn Leu Lys Gly Pro Lys Ile Lys Gly Gly Ala Asp Val Ser Gly Gly
 20 25 30
 Val Ser Ala Pro Xaa Ile Ser Leu Gly Glu Gly His Leu Ser Val Lys
 35 40 45
 Gly Ser Gly Gly Glu Trp Lys Gly Pro Gln Val Ser Ser Ala Leu Asn
 50 55 60
 Leu Asp Thr Ser Lys Phe Ala Gly Gly Leu His Phe Ser Gly Pro Lys
 65 70 75 80
 Val Glu Gly Gly Val Lys Gly Gly Gln Ile Gly Leu Gln Ala Pro Gly
 85 90 95
 Leu Ser Val Ser Gly Pro Gln Gly His Leu Glu Ser Gly Ser Gly Lys
 100 105 110
 Val Thr Phe Pro Lys Met Lys Ile Pro Lys Phe Thr Phe Ser Gly Arg
 115 120 125
 Glu Leu Val Gly Arg Glu Met Gly Val Asp Val His Phe Pro Lys Ala
 130 135 140
 Glu Ala Ser Ile Gln Ala Gly Ala Gly Asp Gly Glu Trp Glu Glu Ser
 145 150 155 160
 Glu Val Lys Leu Lys Lys Ser Lys Ile Lys Met Pro Lys Phe Asn Phe
 165 170 175
 Ser Lys Pro Lys Gly Lys Gly Gly Val Thr Gly Ser Pro Glu Ala Ser
 180 185 190
 Ile Ser Gly Ser Lys Gly Asp Leu Lys Ser Ser Lys Ala Ser Leu Gly
 195 200 205
 Ser Leu Glu Gly Glu Ala Glu Ala Glu Ala Ser Ser Pro Lys Gly Lys
 210 215 220
 Phe Ser Leu Phe Lys Ser Lys Lys Pro Arg His Arg Cys Lys Phe Ile
 225 230 235 240
 Gln

<210> 611

572

<211> 77

<212> PRT

<213> Homo sapiens

<400> 611

```

His Tyr Arg Arg Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly Ser
 1             5             10             15

Thr His Ala Ser Gly Val Ala Asp Gly Gly Gln Val Phe Leu Phe Pro
      20             25             30

Glu Thr Gly Ser Val Gln Thr Ala Asn Ala His Arg Trp Pro Arg Gly
      35             40             45

Gly Gly Ser Gln Gly Val Trp Val Phe Leu Gly Phe Phe Ser Val Val
      50             55             60

Ser Phe Thr Gln Gly Trp Trp Ser Gln Pro Val Trp Cys
      65             70             75

```

<210> 612

<211> 137

<212> PRT

<213> Homo sapiens

<400> 612

```

Leu Gln Val Pro Val Arg Asn Ser Gly Ser Pro Thr Arg Gln Ala Ala
 1             5             10             15

Ala Met Thr Phe Cys Arg Leu Leu Asn Arg Cys Gly Glu Ala Ala Arg
      20             25             30

Ser Leu Pro Leu Gly Ala Arg Cys Phe Gly Val Arg Val Ser Pro Thr
      35             40             45

Gly Glu Lys Val Thr His Thr Gly Gln Val Tyr Asp Asp Lys Asp Tyr
      50             55             60

Arg Arg Ile Arg Phe Val Gly Arg Gln Lys Glu Val Asn Glu Asn Phe
      65             70             75             80

Ala Ile Asp Leu Ile Ala Glu Gln Pro Val Ser Glu Val Glu Thr Arg
      85             90             95

Val Ile Ala Cys Asp Gly Gly Gly Gly Ala Leu Gly His Pro Lys Val
      100            105            110

Tyr Ile Asn Leu Asp Lys Glu Thr Lys Thr Gly Thr Cys Gly Tyr Cys
      115            120            125

```


Gly Leu Gln Phe Arg Gln His His His
130 135

<210> 613
<211> 122
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (50)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (75)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (85)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (98)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (111)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (116)
<223> Xaa equals any of the naturally occurring L-amino acids

574

<400> 613

```

Tyr Ser Thr Asp Asn Asn Asn Trp Tyr Ser Ile Phe Tyr Leu His
 1             5             10             15

Ser Ser Phe Leu Gly Glu Asn Ala Glu Lys Leu Leu Gln Phe Lys Arg
          20             25             30

Trp Phe Trp Ser Ile Val Glu Lys Met Ser Met Thr Glu Arg Gln Asp
          35             40             45

Leu Xaa Tyr Phe Trp Thr Ser Ser Pro Ser Leu Pro Ala Ser Glu Glu
 50             55             60

Gly Phe Gln Pro Met Pro Ser Ile Thr Ile Xaa Pro Pro Asp Asp Xaa
 65             70             75             80

His Leu Pro Thr Xaa Lys Tyr Leu His Phe Leu Asp Phe Thr Phe Pro
          85             90             95

Leu Xaa Ser Phe Lys Gln Asp Ser Xaa Asn Arg Lys Leu Val Xaa Ser
          100             105             110

Pro Phe Arg Xaa Gln Lys Phe Trp Val Leu
          115             120

```

<210> 614

<211> 62

<212> PRT

<213> Homo sapiens

<400> 614

```

Phe Phe Ile Gly Leu Glu Thr Arg Ala Asn Ser Ile Met Phe Ser Lys
 1             5             10             15

Glu Thr Asp Leu Ser Cys Trp Ile Arg Gly Thr Asn Pro Thr Tyr Met
          20             25             30

Ile Phe Phe Leu Phe Leu Ser Cys Ser Tyr Gly Thr Val Leu Phe Gly
          35             40             45

Thr Phe Ala Thr Arg Asp Asn Thr Thr Phe Leu Thr Leu Ile
          50             55             60

```

<210> 615

<211> 159

<212> PRT

<213> Homo sapiens

575

<400> 615

Val Gly Leu Pro Asn Met Ala Gln Ser Ile Asn Ile Thr Glu Leu Asn
 1 5 10 15

Leu Pro Gln Leu Glu Met Leu Lys Asn Gln Leu Asp Gln Glu Val Glu
 20 25 30

Phe Leu Ser Thr Ser Ile Ala Gln Leu Lys Val Val Gln Thr Lys Tyr
 35 40 45

Val Glu Ala Lys Asp Cys Leu Asn Val Leu Asn Lys Ser Asn Glu Gly
 50 55 60

Lys Glu Leu Leu Val Pro Leu Thr Ser Ser Met Tyr Val Pro Gly Lys
 65 70 75 80

Leu His Asp Val Glu His Val Leu Ile Asp Val Gly Thr Gly Tyr Tyr
 85 90 95

Val Glu Lys Thr Ala Glu Asp Ala Lys Asp Phe Phe Lys Arg Lys Ile
 100 105 110

Asp Phe Leu Thr Lys Gln Met Glu Lys Ile Gln Pro Ala Leu Gln Glu
 115 120 125

Lys His Ala Met Lys Gln Ala Val Met Glu Met Met Ser Gln Lys Ile
 130 135 140

Gln Gln Leu Thr Ala Leu Gly Ala Ala Gln Ala Thr Ala Lys Ala
 145 150 155

<210> 616

<211> 93

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (8)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 616

Lys Val Ala Cys Arg Tyr Arg Xaa Gly Ile Pro Gly Arg Pro Thr Arg
 1 5 10 15

Pro Gly Thr Gln Asp Ala Glu Gly Lys Lys Ala Lys Gly Lys Lys Val
 20 25 30

576

Ala Pro Ala Pro Ala Val Val Lys Lys Gln Glu Ala Lys Lys Val Val
 35 40 45

Asn Pro Leu Phe Glu Lys Arg Pro Lys Asn Phe Gly Ile Gly Gln Asp
 50 55 60

Ile Gln Pro Lys Arg Asp Leu Thr Arg Phe Val Lys Trp Pro Arg Tyr
 65 70 75 80

Ile Arg Leu Gln Arg His Ala Arg Ser Ser Thr Ser Gly
 85 90

<210> 617

<211> 362

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (307)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 617

Ser Arg Val Asp Pro Arg Val Arg Arg Gly Val Pro Tyr Gln Leu Gly
 1 5 10 15

Pro His Gly His Arg Gln Gly Leu Glu Ala Pro Leu Tyr Leu Thr Pro
 20 25 30

Glu Gly Trp Ser Leu Phe Leu Gln Arg Tyr Tyr Gln Val Val His Glu
 35 40 45

Gly Ala Glu Leu Arg His Leu Asp Thr Gln Val Gln Arg Cys Glu Asp
 50 55 60

Ile Leu Gln Gln Leu Gln Ala Val Val Pro Gln Ile Asp Met Glu Gly
 65 70 75 80

Asp Arg Asn Ile Trp Ile Val Lys Pro Gly Ala Lys Ser Arg Gly Arg
 85 90 95

Gly Ile Met Cys Met Asp His Leu Glu Glu Met Leu Lys Leu Val Asn
 100 105 110

Gly Asn Pro Val Val Met Lys Asp Gly Lys Trp Val Val Gln Lys Tyr
 115 120 125

Ile Glu Arg Pro Leu Leu Ile Phe Gly Thr Lys Phe Asp Leu Arg Gln
 130 135 140

577

Trp Phe Leu Val Thr Asp Trp Asn Pro Leu Thr Val Trp Phe Tyr Arg
 145 150 155 160
 Asp Ser Tyr Ile Arg Phe Ser Thr Gln Pro Phe Ser Leu Lys Asn Leu
 165 170 175
 Asp Asn Ser Val His Leu Cys Asn Asn Ser Ile Gln Lys His Leu Glu
 180 185 190
 Asn Ser Cys His Arg His Pro Leu Leu Pro Pro Asp Asn Met Trp Ser
 195 200 205
 Ser Gln Arg Phe Gln Ala His Leu Gln Glu Met Gly Ala Pro Asn Ala
 210 215 220
 Trp Ser Thr Ile Ile Val Pro Gly Met Lys Asp Ala Val Ile His Ala
 225 230 235 240
 Leu Gln Thr Ser Gln Asp Thr Val Gln Cys Arg Lys Ala Ser Phe Glu
 245 250 255
 Leu Tyr Gly Ala Asp Phe Val Phe Gly Glu Asp Phe Gln Pro Trp Leu
 260 265 270
 Ile Glu Ile Asn Ala Ser Pro Thr Met Ala Pro Ser Thr Ala Val Thr
 275 280 285
 Ala Arg Leu Cys Ala Gly Val Gln Ala Asp Thr Leu Arg Val Val Ile
 290 295 300
 Asp Arg Xaa Leu Asp Arg Asn Cys Asp Thr Gly Ala Phe Glu Leu Ile
 305 310 315 320
 Tyr Lys Gln Pro Ala Val Glu Val Pro Gln Tyr Val Gly Ile Arg Leu
 325 330 335
 Leu Val Glu Gly Phe Thr Ile Lys Lys Pro Met Ala Met Cys His Arg
 340 345 350
 Arg Met Gly Val Arg Gln Gln Ser Leu Cys
 355 360

<210> 618

<211> 328

<212> PRT

<213> Homo sapiens

<400> 618

578

Ile	Arg	Met	Arg	Glu	Trp	Trp	Val	Gln	Val	Gly	Leu	Leu	Ala	Val	Pro	1	5	10	15
Leu	Leu	Ala	Ala	Tyr	Leu	His	Ile	Pro	Pro	Pro	Gln	Leu	Ser	Pro	Ala	20	25	30	
Leu	His	Ser	Trp	Lys	Ser	Ser	Gly	Lys	Phe	Phe	Thr	Tyr	Lys	Gly	Leu	35	40	45	
Arg	Ile	Phe	Tyr	Gln	Asp	Ser	Val	Gly	Val	Val	Gly	Ser	Pro	Glu	Ile	50	55	60	
Val	Val	Leu	Leu	His	Gly	Phe	Pro	Thr	Ser	Ser	Tyr	Asp	Trp	Tyr	Lys	65	70	75	80
Ile	Trp	Glu	Gly	Leu	Thr	Leu	Arg	Phe	His	Arg	Val	Ile	Ala	Leu	Asp	85	90	95	
Phe	Leu	Gly	Phe	Gly	Phe	Ser	Asp	Lys	Pro	Arg	Pro	His	His	Tyr	Ser	100	105	110	
Ile	Phe	Glu	Gln	Ala	Ser	Ile	Val	Glu	Ala	Leu	Leu	Arg	His	Leu	Gly	115	120	125	
Leu	Gln	Asn	Arg	Arg	Ile	Asn	Leu	Leu	Ser	His	Asp	Tyr	Gly	Asp	Ile	130	135	140	
Val	Ala	Gln	Glu	Leu	Leu	Tyr	Arg	Tyr	Lys	Gln	Asn	Arg	Ser	Gly	Arg	145	150	155	160
Leu	Thr	Ile	Lys	Ser	Leu	Cys	Leu	Ser	Asn	Gly	Gly	Ile	Phe	Pro	Glu	165	170	175	
Thr	His	Arg	Pro	Leu	Leu	Leu	Gln	Lys	Leu	Leu	Lys	Asp	Gly	Gly	Val	180	185	190	
Leu	Ser	Pro	Ile	Leu	Thr	Arg	Leu	Met	Asn	Phe	Phe	Val	Phe	Ser	Arg	195	200	205	
Gly	Leu	Thr	Pro	Val	Phe	Gly	Pro	Tyr	Thr	Arg	Pro	Ser	Glu	Ser	Glu	210	215	220	
Leu	Trp	Asp	Met	Trp	Ala	Gly	Ile	Arg	Asn	Asn	Asp	Gly	Asn	Leu	Val	225	230	235	240
Ile	Asp	Ser	Leu	Leu	Gln	Tyr	Ile	Asn	Gln	Arg	Lys	Lys	Phe	Arg	Arg	245	250	255	
Arg	Trp	Val	Gly	Ala	Leu	Ala	Ser	Val	Thr	Ile	Pro	Ile	His	Phe	Ile	260	265	270	

579

Tyr Gly Pro Leu Asp Pro Val Asn Pro Tyr Pro Glu Phe Leu Glu Leu
 275 280 285
 Tyr Arg Lys Thr Leu Pro Arg Ser Thr Val Ser Ile Leu Asp Asp His
 290 295 300
 Ile Ser His Tyr Pro Gln Leu Glu Asp Pro Met Gly Phe Leu Asn Ala
 305 310 315 320
 Tyr Met Gly Phe Ile Asn Ser Phe
 325

<210> 619
 <211> 271
 <212> PRT
 <213> Homo sapiens

<400> 619
 Asn Met Asp Pro Pro Gly Leu Gln Gly Val Gln Gly Thr Val Ala Ala
 1 5 10 15
 Cys Gly Ala Cys Tyr Trp Leu Leu Gly Leu Met Ala Val Arg Ala Ser
 20 25 30
 Phe Glu Asn Asn Cys Glu Ile Gly Cys Phe Ala Lys Leu Thr Asn Thr
 35 40 45
 Tyr Cys Leu Val Ala Ile Gly Gly Ser Glu Asn Phe Tyr Ser Val Phe
 50 55 60
 Glu Gly Glu Leu Ser Asp Thr Ile Pro Val Val His Ala Ser Ile Ala
 65 70 75 80
 Gly Cys Arg Ile Ile Gly Arg Met Cys Val Gly Asn Arg His Gly Leu
 85 90 95
 Leu Val Pro Asn Asn Thr Thr Asp Gln Glu Leu Gln His Ile Arg Asn
 100 105 110
 Ser Leu Pro Asp Thr Val Gln Ile Arg Arg Val Glu Glu Arg Leu Ser
 115 120 125
 Ala Leu Gly Asn Val Thr Thr Cys Asn Asp Tyr Val Ala Leu Val His
 130 135 140
 Pro Asp Leu Asp Arg Glu Thr Glu Glu Ile Leu Ala Asp Val Leu Lys
 145 150 155 160
 Val Glu Val Phe Arg Gln Thr Val Ala Asp Gln Val Leu Val Gly Ser

580

	165		170		175
Tyr Cys Val Phe Ser Asn Gln Gly Gly Leu Val His Pro Lys Thr Ser					
	180		185		190
Ile Glu Asp Gln Asp Glu Leu Ser Ser Leu Leu Gln Val Pro Leu Val					
	195		200		205
Ala Gly Thr Val Asn Arg Gly Ser Glu Val Ile Ala Ala Gly Met Val					
	210		215		220
Val Asn Asp Trp Cys Ala Phe Cys Gly Leu Asp Thr Thr Ser Thr Glu					
	225		230		235
Leu Ser Val Val Glu Ser Val Phe Lys Leu Asn Glu Ala Gln Pro Ser					
	245		250		255
Thr Ile Ala Thr Ser Met Arg Asp Ser Leu Ile Asp Ser Leu Thr					
	260		265		270

<210> 620

<211> 88

<212> PRT

<213> Homo sapiens

<400> 620

Gly Ser Ala Ala Met Lys Val Lys Ile Lys Cys Trp Asn Gly Val Ala					
1		5		10	15
Thr Trp Leu Trp Val Ala Asn Asp Glu Asn Cys Gly Ile Cys Arg Met					
	20		25		30
Ala Phe Asn Gly Cys Cys Pro Asp Cys Lys Val Pro Gly Asp Asp Cys					
	35		40		45
Pro Leu Val Trp Gly Gln Cys Ser His Cys Phe His Met His Cys Ile					
	50		55		60
Leu Lys Trp Leu His Ala Gln Gln Val Gln Gln His Cys Pro Met Cys					
	65		70		75
Arg Gln Glu Trp Lys Phe Lys Glu					
	85				

<210> 621

<211> 46

<212> PRT

581

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 621

Ala	Gly	Thr	Ser	Arg	Ser	Glu	Gly	Lys	Arg	Ser	Ser	Val	Leu	Thr	Arg
1				5				10					15		

Thr	Glu	Phe	Gln	Ile	Glu	Met	Phe	Gln	Thr	Ile	Glu	Gly	Glu	Lys	Trp
			20					25					30		

Pro	Gly	Xaa	Ser	Ile	Asn	Leu	Ser	Xaa	Phe	His	Gly	Cys	Phe
		35				40						45	

<210> 622

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 622

Gly	Arg	Pro	Thr	Arg	Pro	Arg	Gly	Arg	Gly	Arg	Ser	Ser	Ala	Cys	Leu
1				5				10					15		

Leu	Leu	Glu	Gly	Asp	Gly	Pro	Ala	Arg	Leu	Trp	Ala	Pro	Thr	Ser	Pro
			20					25					30		

Gly	Val	Xaa	Xaa	Glu	Arg	Phe	Ala	Glu	Glu	Arg	Gly	Ser	Gly	Arg	Ala
		35					40						45		

Leu	Asn	Ala	Gly	Pro	Lys	His	Pro	Gly	Ser	Leu	His	Ser	Pro	Arg	Pro
	50					55					60				

582

Gln Thr Leu Thr Lys Thr Trp Ile Cys Ser Arg Phe Ser Cys Ser Arg
 65 70 75 80
 Ser Ser Arg Ser Cys Pro Arg Leu Leu Arg Leu Arg Ala Glu Lys Lys
 85 90 95
 Val Cys Gln Ala Trp Thr Gln
 100

<210> 623
 <211> 103
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (60)
 <223> Xaa equals any of the naturally occurring-L-amino acids

<400> 623
 Gly Arg Pro Thr Arg Pro Thr Ser Ser Arg Ser Arg Ala Ala Arg Pro
 1 5 10 15
 Phe Phe Phe Phe Phe Phe Phe Trp Phe Pro Glu Phe Gly Phe Ile Leu
 20 25 30
 Gln Tyr Arg Asn His Leu Glu Pro Ser Glu Thr Asp Ile Pro Glu Ala
 35 40 45
 Glu Ala Leu Ser Asn Gln Tyr Cys Val Ala Leu Xaa Pro Leu Arg Lys
 50 55 60
 Pro His Leu Gly Tyr Lys Arg Ser Phe Tyr Val Tyr Pro Leu Tyr His
 65 70 75 80
 Gly Phe Leu Ser Pro Leu Leu Leu Pro Ile Leu Pro Gly Glu Asn Thr
 85 90 95
 Ala Gln Arg Leu Pro Ser Glu
 100

<210> 624
 <211> 305
 <212> PRT
 <213> Homo sapiens

<220>

<221> SITE

<222> (116)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (219)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 624

Thr	Gln	Asp	Leu	Trp	Met	Ser	Cys	Pro	Val	Gln	Thr	Met	Asp	Pro	Glu
1				5					10					15	

Val	Thr	Leu	Leu	Leu	Gln	Cys	Pro	Gly	Gly	Gly	Leu	Pro	Gln	Glu	Gln
		20						25					30		

Ile	Gln	Ala	Glu	Leu	Ser	Pro	Ala	His	Asp	Arg	Arg	Pro	Leu	Pro	Gly
		35					40					45			

Gly	Asp	Glu	Ala	Ile	Thr	Ala	Ile	Trp	Glu	Thr	Arg	Leu	Lys	Ala	Gln
	50					55					60				

Pro	Trp	Leu	Phe	Asp	Ala	Pro	Lys	Phe	Arg	Leu	His	Ser	Ala	Thr	Leu
65					70					75				80	

Ala	Pro	Ile	Gly	Ser	Arg	Gly	Pro	Gln	Leu	Leu	Leu	Arg	Leu	Gly	Leu
				85				90						95	

Thr	Ser	Tyr	Arg	Asp	Phe	Leu	Gly	Thr	Asn	Trp	Ser	Ser	Ser	Ala	Ala
			100					105					110		

Trp	Leu	Arg	Xaa	Xaa	Gly	Ala	Thr	Asp	Trp	Gly	Asp	Thr	Gln	Ala	Tyr
	115					120						125			

Leu	Ala	Asp	Pro	Leu	Gly	Val	Gly	Ala	Ala	Leu	Ala	Thr	Ala	Asp	Asp
	130					135						140			

Phe	Leu	Val	Phe	Leu	Arg	Arg	Ser	Arg	Gln	Val	Ala	Glu	Ala	Pro	Gly
145					150					155					160

Leu	Val	Asp	Val	Pro	Gly	Gly	His	Pro	Glu	Pro	Gln	Ala	Leu	Cys	Pro
				165					170					175	

Gly	Gly	Ser	Pro	Gln	His	Gln	Asp	Leu	Ala	Gly	Gln	Leu	Val	Val	His
			180					185					190		

584

Glu Leu Phe Ser Ser Val Leu Gln Glu Ile Cys Asp Glu Val Asn Leu
 195 200 205
 Pro Leu Leu Thr Leu Ser Gln Pro Leu Leu Xaa Gly Ile Ala Arg Asn
 210 215 220
 Glu Thr Ser Ala Gly Arg Ala Ser Ala Glu Phe Tyr Val Gln Cys Ser
 225 230 235 240
 Leu Thr Ser Glu Gln Val Arg Lys His Tyr Leu Ser Gly Gly Pro Glu
 245 250 255
 Ala His Glu Ser Thr Gly Ile Phe Phe Val Glu Thr Gln Asn Val Arg
 260 265 270
 Arg Leu Pro Glu Thr Glu Met Trp Ala Glu Leu Cys Pro Ser Pro Lys
 275 280 285
 Ala Pro Ser Ser Ser Thr Thr Gly Phe Arg Glu Val Pro Leu Glu Arg
 290 295 300
 Pro
 305

<210> 625
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 625
 Ser Ala Met Lys Ala Ser Gly Thr Leu Arg Glu Tyr Lys Val Val Gly
 1 5 10 15
 Arg Cys Leu Pro Thr Pro Lys Cys Arg Thr Pro Pro Leu Tyr Arg Met
 20 25 30
 Arg Ile Phe Ala Pro Asn His Val Val Ala Lys Ser Arg Phe Trp Tyr
 35 40 45
 Phe Val Ser Gln Leu Lys Lys Met Lys Lys Ser Ser Gly Glu Ile Val
 50 55 60
 Tyr Cys Gly Gln Val Phe Glu Lys Ser Pro Leu Arg Val Lys Asn Phe
 65 70 75 80
 Gly Ile Trp Leu Arg Tyr Asp Ser Arg Ser Gly Thr His Asn Met Tyr
 85 90 95

585

Arg Gly Val Pro Gly Thr
100

<210> 626

<211> 59

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (36)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 626

Ala Leu Trp Val Lys Ala Trp Arg Gln Glu Ser Glu Gly Gln Phe Gln
1 5 10 15

Glu Thr Gln Phe Ile Asn Phe His Gln His Leu Pro Gly Pro Cys Leu
20 25 30

Gly Thr Glu Xaa Pro Ser Pro Glu Ser Gly His His Phe Pro Phe Gln
35 40 45

Ser Ile Glu Cys Arg Gly Ile Gln Gly Met Gly
50 55

<210> 627

<211> 220

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (93)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 627

Arg Leu Val Val Thr Glu Glu Asp Gly Gly Ala Arg Pro Glu Ala Leu
1 5 10 15

Gly Lys Ile Ala Pro Arg Thr Pro Ala Glu Leu Gly Ala Arg Ala Asp
20 25 30

Gln Glu Leu Val Thr Ala Leu Met Cys Asp Leu Arg Arg Pro Ala Ala
35 40 45

Gly Gly Met Met Asp Leu Ala Tyr Val Cys Glu Trp Glu Lys Trp Ser

586

50		55		60
Lys Ser Thr His Cys Pro Ser Val Pro Leu Ala Cys Ala Trp Ser Cys				
65		70		75
Arg Asn Leu Ile Ala Phe Thr Met Asp Leu Arg Thr Xaa Asp Gln Asp				
	85		90	95
Leu Thr Arg Met Ile His Ile Leu Asp Thr Glu His Pro Trp Asp Leu				
	100		105	110
His Ser Ile Pro Ser Glu His His Glu Ala Ile Thr Cys Leu Glu Trp				
	115		120	125
Asp Gln Ser Gly Ser Arg Leu Leu Ser Ala Asp Ala Asp Gly Gln Ile				
	130		135	140
Lys Cys Trp Ser Met Ala Asp His Leu Ala Asn Ser Trp Glu Ser Ser				
	145		150	155
Val Gly Ser Leu Val Glu Gly Asp Pro Ile Val Ala Leu Ser Trp Leu				
	165		170	175
His Asn Gly Val Lys Leu Ala Leu His Val Glu Lys Ser Gly Ala Ser				
	180		185	190
Ser Phe Gly Glu Lys Phe Ser Arg Val Lys Phe Ser Pro Val Leu Thr				
	195		200	205
Leu Phe Gly Gly Lys Pro Trp Arg Ala Gly Ser Arg				
	210		215	220

<210> 628

<211> 119

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (117)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 628

Pro Ala Ser Val Glu Val Tyr His Asp Ser Leu Cys Arg Lys Ile Trp

587

```

      1             5             10             15
Arg Glu Asp Asp Lys Trp His Val Ile Phe Arg Ala Asp Gly Trp Glu
      20             25             30
Gln His Ile Thr Ala Arg Tyr Leu Val Gly Ala Asp Gly Ala Asn Ser
      35             40             45
Met Val Arg Arg His Leu Tyr Pro Asp His Gln Ile Arg Lys Tyr Val
      50             55             60
Ala Ile Gln Gln Trp Phe Ala Glu Lys His Pro Val Pro Phe Tyr Ser
      65             70             75             80
Cys Ile Phe Asp Asn Ser Ile Thr Asn Cys Tyr Ser Trp Ser Ile Ser
      85             90             95
Lys Asp Gly Tyr Phe Ile Phe Gly Gly Ala Tyr Pro Met Glu Arg Arg
      100            105            110
Ser Asp Xaa Phe Xaa Asp Ala
      115

```

<210> 629

<211> 39

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 629

```

Phe Gly Glu Pro Ser Leu Thr Val Arg Ala Asp Ile Thr Gly Arg Tyr
  1             5             10             15
Ser Ile Val Ser Met Leu Thr Thr Cys Arg Tyr Ser Leu Xaa Xaa His
      20             25             30
Met Lys Lys Val Ser Ser Cys
      35

```

588

<210> 630

<211> 267

<212> PRT

<213> Homo sapiens

<400> 630

Ser	Ala	Ala	Leu	Pro	Gln	Pro	Thr	Pro	Pro	Leu	Thr	Leu	Pro	Gln	Ser
1				5					10					15	

Met	Val	Asn	Thr	Lys	Pro	Glu	Lys	Thr	Glu	Glu	Asp	Ser	Glu	Glu	Val
			20					25					30		

Arg	Glu	Gln	Lys	His	Lys	Thr	Phe	Val	Glu	Lys	Tyr	Glu	Lys	Gln	Ile
		35					40					45			

Lys	His	Phe	Gly	Met	Leu	Arg	Arg	Trp	Asp	Asp	Ser	Gln	Lys	Tyr	Leu
	50					55					60				

Ser	Asp	Asn	Val	His	Leu	Val	Cys	Glu	Glu	Thr	Ala	Asn	Tyr	Leu	Val
65					70					75					80

Ile	Trp	Cys	Ile	Asp	Leu	Glu	Val	Glu	Glu	Lys	Cys	Ala	Leu	Met	Glu
			85						90					95	

Gln	Val	Ala	His	Gln	Thr	Ile	Val	Met	Gln	Phe	Ile	Leu	Glu	Leu	Ala
		100						105					110		

Lys	Ser	Leu	Lys	Val	Asp	Pro	Arg	Ala	Cys	Phe	Arg	Gln	Phe	Phe	Thr
	115						120					125			

Lys	Ile	Lys	Thr	Ala	Asp	Arg	Gln	Tyr	Met	Glu	Gly	Phe	Asn	Asp	Glu
	130					135					140				

Leu	Glu	Ala	Phe	Lys	Glu	Arg	Val	Arg	Gly	Arg	Ala	Lys	Leu	Arg	Ile
145					150					155					160

Glu	Lys	Ala	Met	Lys	Glu	Tyr	Glu	Glu	Glu	Glu	Arg	Lys	Lys	Arg	Leu
			165						170					175	

Gly	Pro	Gly	Gly	Leu	Asp	Pro	Val	Glu	Val	Tyr	Glu	Ser	Leu	Pro	Glu
		180						185					190		

Glu	Leu	Gln	Lys	Cys	Phe	Asp	Val	Lys	Asp	Val	Gln	Met	Leu	Gln	Asp
	195						200					205			

Ala	Ile	Ser	Lys	Met	Asp	Pro	Thr	Asp	Ala	Lys	Tyr	His	Met	Gln	Arg
	210					215					220				

Cys	Ile	Asp	Ser	Gly	Leu	Trp	Val	Pro	Asn	Ser	Lys	Ala	Ser	Glu	Ala
225					230					235					240

Lys Glu Gly Glu Glu Ala Gly Pro Gly Asp Pro Leu Leu Glu Ala Val
245 250 255

Pro Lys Thr Gly Asp Glu Lys Asp Val Ser Val
260 265

<210> 631

<211> 207

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

$\langle 222 \rangle$ (164)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 631

Pro Thr Gly Thr Gly Ser Gly Val Pro Gly Leu Gly Arg Asn Gly Gly
1 5 10 15

Arg Glu Gly Ala Pro Gly Thr Met Gly Leu Leu Thr Ile Leu Lys Lys
20 25 30

Met Lys Gln Lys Glu Arg Glu Leu Arg Leu Leu Met Leu Gly Leu Asp
35 40 45

Asn Ala Gly Lys Thr Thr Ile Leu Lys Lys Phe Asn Gly Glu Asp Ile
50 55 60

Asp Thr Ile Ser Pro Thr Leu Gly Phe Asn Ile Lys Thr Leu Glu His
65 70 75 80

Arg Gly Phe Lys Leu Asn Ile Trp Asp Val Gly Gly Gln Lys Ser Leu
85 90 95

Arg Ser Tyr Trp Arg Asn Tyr Phe Glu Ser Thr Asp Gly Leu Ile Trp
100 105 110

Val Val Asp Ser Ala Asp Arg Gln Arg Met Gln Asp Cys Gln Arg Glu
115 120 125

Leu Gln Ser Leu Leu Val Glu Glu Arg Leu Ala Gly Ala Thr Leu Leu
130 135 140

Ile Phe Ala Asn Lys Gln Asp Leu Pro Gly Ala Leu Ser Ser Asn Ala
145 150 155 160

Ile Arg Glu Xaa Leu Glu Leu Asp Ser Ile Arg Ser His His Trp Cys

590

	165		170		175										
Ile	Gln	Gly	Cys	Ser	Ala	Val	Thr	Gly	Glu	Asn	Leu	Leu	Pro	Gly	Ile
			180					185					190		
Asp	Trp	Leu	Leu	Asp	Asp	Ile	Ser	Ser	Arg	Ile	Phe	Thr	Ala	Asp	
		195					200					205			

<210> 632

<211> 79

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (60)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 632

Lys	Asn	Asn	Lys	Lys	Asp	Gln	Gln	Asn	Gly	Ile	Cys	Ser	His	Thr	Met
1				5					10					15	

Ile	Lys	Thr	Tyr	Leu	Arg	Thr	Ala	Leu	Phe	Met	Gly	Lys	Arg	Ser	Leu
			20					25					30		

Ile	Asp	Ser	Gln	Phe	His	Arg	Leu	Tyr	Arg	Arg	His	Gly	Leu	Gly	Arg
		35					40					45			

Pro	Gln	Gly	Asn	Leu	Xaa	Ser	Met	Val	Glu	Gly	Xaa	Xaa	Gly	Ser	Met
	50					55					60				

His	His	Leu	His	Trp	Pro	Glu	Gln	Xaa	Glu	Arg	Glu	Gln	Ile	Trp	
65					70					75					

591

<210> 633
 <211> 293
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (249)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (282)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 633

Trp Ser Pro Ser Pro Pro Ala Thr Pro Glu Gln Gly Leu Ser Ala Phe
 1 5 10 15

Tyr Leu Ser Tyr Phe Asp Met Leu Tyr Pro Glu Asp Ser Ser Trp Ala
 20 25 30

Ala Lys Ala Pro Gly Ala Ser Ser Arg Glu Glu Pro Pro Glu Glu Pro
 35 40 45

Glu Gln Cys Pro Val Ile Asp Ser Gln Ala Pro Ala Gly Ser Leu Asp
 50 55 60

Leu Val Pro Gly Gly Leu Thr Leu Glu Glu His Ser Leu Glu Gln Val
 65 70 75 80

Gln Ser Met Val Val Gly Glu Val Leu Lys Asp Ile Glu Thr Ala Cys
 85 90 95

Lys Leu Leu Asn Ile Thr Ala Asp Pro Met Asp Trp Ser Pro Ser Asn
 100 105 110

Val Gln Lys Trp Leu Leu Trp Thr Glu His Gln Tyr Arg Leu Pro Pro
 115 120 125

Met Gly Lys Ala Phe Gln Glu Leu Ala Gly Lys Glu Leu Cys Ala Met
 130 135 140

Ser Glu Glu Gln Phe Arg Gln Arg Ser Pro Leu Gly Gly Asp Val Leu
 145 150 155 160

His Ala His Leu Asp Ile Trp Lys Ser Ala Ala Trp Met Lys Glu Arg
 165 170 175

592

Thr Ser Pro Gly Ala Ile His Tyr Cys Ala Ser Thr Ser Glu Glu Ser
 180 185 190
 Trp Thr Asp Ser Glu Val Asp Ser Ser Cys Ser Gly Gln Pro Ile His
 195 200 205
 Leu Trp Gln Phe Leu Lys Glu Leu Leu Leu Lys Pro His Ser Tyr Gly
 210 215 220
 Arg Phe Ile Arg Trp Leu Asn Lys Glu Lys Gly Ile Phe Lys Ile Glu
 225 230 235 240
 Asp Ser Ala Gln Val Ala Arg Leu Xaa Gly Ile Arg Lys Asn Arg Pro
 245 250 255
 Ala Met Asn Tyr Asp Lys Leu Ser Arg Ser Ile Arg Gln Tyr Tyr Lys
 260 265 270
 Lys Gly Ile Ile Arg Lys Pro Asp Ile Xaa Gln Arg Leu Val Tyr Gln
 275 280 285
 Phe Val His Pro Ile
 290

<210> 634
 <211> 227
 <212> PRT
 <213> Homo sapiens

<400> 634
 Pro Ala Gly Thr Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Ala
 1 5 10 15
 Glu Glu Glu Glu Glu Glu Asp Glu Glu Glu Glu Glu Glu Glu Glu
 20 25 30
 Glu Glu Glu Glu Glu Pro Gln Gln Arg Gly Gln Gly Glu Lys Ser Ala
 35 40 45
 Thr Pro Ser Arg Lys Ile Leu Asp Pro Asn Thr Gly Glu Pro Ala Pro
 50 55 60
 Val Leu Ser Ser Pro Pro Pro Ala Asp Val Ser Thr Phe Leu Ala Phe
 65 70 75 80
 Pro Ser Pro Glu Lys Leu Leu Arg Leu Gly Pro Lys Ser Ser Val Leu
 85 90 95
 Ile Ala Gln Gln Thr Asp Thr Ser Asp Pro Glu Lys Val Val Ser Ala

593

100	105	110
Phe Leu Lys Val Ser Ser Val	Phe Lys Asp Glu Ala Thr Val Arg Met	
115	120	125
Ala Val Gln Asp Ala Val Asp	Ala Leu Met Gln Lys Ala Phe Asn Ser	
130	135	140
Ser Ser Phe Asn Ser Asn Thr Phe Leu Thr Arg Leu Leu Val His Met		
145	150	155 160
Gly Leu Leu Lys Ser Glu Asp Lys Val Lys Ala Ile Ala Asn Leu Tyr		
165	170	175
Gly Pro Leu Met Ala Leu Asn His Met Val Gln Gln Asp Tyr Phe Pro		
180	185	190
Lys Ala Leu Ala Pro Leu Leu Leu Ala Phe Val Thr Lys Pro Asn Ser		
195	200	205
Ala Leu Glu Ser Cys Ser Phe Ala Arg His Ser Leu Leu Gln Thr Leu		
210	215	220
Tyr Lys Val		
225		

<210> 635
 <211> 126
 <212> PRT
 <213> Homo sapiens

<400> 635

Thr Ser Gly Cys Ile Ser Asn Gly Lys Met Ser Ser Asn Val Pro Ala
1 5 10 15
Asp Met Ile Asn Leu Arg Leu Ile Leu Val Ser Gly Lys Thr Lys Glu
20 25 30
Phe Leu Phe Ser Pro Asn Asp Ser Ala Ser Asp Ile Ala Lys His Val
35 40 45
Tyr Asp Asn Trp Pro Met Asp Trp Glu Glu Glu Gln Val Ser Ser Pro
50 55 60
Asn Ile Leu Arg Leu Ile Tyr Gln Gly Arg Phe Leu His Gly Asn Val
65 70 75 80
Thr Leu Gly Ala Leu Lys Leu Pro Phe Gly Lys Thr Thr Val Met His
85 90 95

594

Leu Val Ala Arg Glu Thr Leu Pro Glu Pro Asn Ser Gln Gly Gln Arg
 100 105 110

Asn Arg Glu Lys Thr Gly Glu Ser Asn Cys Cys Val Ile Leu
 115 120 125

<210> 636

<211> 195

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 636

Val Ser Gly Phe Ala Gly Pro Ala Ser Leu Ile Ser Met Lys Leu Leu
 1 5 10 15

Ser Leu Val Ala Val Val Gly Cys Leu Leu Val Pro Pro Ala Glu Ala
 20 25 30

Asn Lys Ser Ser Glu Asp Ile Arg Cys Lys Cys Ile Cys Pro Pro Tyr
 35 40 45

Arg Asn Ile Ser Gly His Ile Tyr Asn Gln Asn Val Ser Gln Lys Asp
 50 55 60

Cys Asn Cys Leu His Val Val Glu Pro Met Pro Val Pro Gly His Asp
 65 70 75 80

Val Glu Ala Tyr Cys Leu Leu Cys Glu Cys Arg Tyr Glu Glu Arg Xaa
 85 90 95

Thr Thr Thr Ile Lys Val Ile Ile Val Ile Tyr Leu Ser Val Val Gly
 100 105 110

Ala Leu Leu Leu Tyr Met Ala Phe Leu Met Leu Val Asp Pro Leu Ile
 115 120 125

Arg Lys Pro Asp Ala Tyr Thr Glu Gln Leu His Asn Glu Glu Glu Asn
 130 135 140

Glu Asp Ala Arg Ser Met Ala Ala Ala Ala Ala Ser Leu Gly Gly Pro
 145 150 155 160

Arg Ala Asn Thr Val Leu Glu Arg Val Glu Gly Ala Gln Gln Arg Trp

595

	165		170		175										
Lys	Leu	Gln	Val	Gln	Glu	Gln	Arg	Lys	Thr	Val	Phe	Asp	Arg	His	Lys
		180						185					190		
Met	Leu	Ser													
		195													

<210> 637
 <211> 159
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (92)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (115)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (138)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (151)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (156)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 637															
Arg	Pro	Thr	Arg	Pro	Gly	Asn	Ser	Arg	Arg	Arg	Gly	Arg	Arg	Gly	Cys
1				5					10					15	

Trp	Arg	Leu	Leu	Gly	Phe	Gly	Ala	Ala	Ala	Ile	Met	Pro	Gly	Ile	Val
			20				25						30		

Glu	Leu	Pro	Thr	Leu	Glu	Asp	Leu	Lys	Val	Gln	Glu	Val	Lys	Val	Ser
		35					40					45			

Ser	Ser	Val	Leu	Lys	Ala	Ala	Ala	His	His	Tyr	Gly	Val	Gln	Cys	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

596

50 55 60
 Lys Pro Asn Lys Glu Phe Met Leu Cys Arg Trp Glu Glu Lys Asp Pro
 65 70 75 80
 Arg Arg Cys Leu Glu Glu Gly Lys Leu Val Asn Xaa Cys Ala Leu Asp
 85 90 95
 Phe Phe Arg Gln Ile Lys Leu Ser Leu Cys Arg Ala Phe Tyr Arg Leu
 100 105 110
 Leu Asp Xaa His Arg Leu Leu Arg Pro Ala Val Phe Ser Ser Leu Pro
 115 120 125
 Gln Thr Ala Gly Gln Phe Asp Asp Val Xaa Gly Ala Thr Gly Met Val
 130 135 140
 Arg Leu Asn Trp Gly Lys Xaa Ser Ser His Gln Xaa Glu Asn Ser
 145 150 155

<210> 638
 <211> 20
 <212> PRT
 <213> Homo sapiens

<400> 638
 Phe Ser Arg Asp Lys Val Ser Pro Cys Trp Pro Gly Trp Ser Arg Thr
 1 5 10 15
 Pro Gly Leu Arg
 20

<210> 639
 <211> 408
 <212> PRT
 <213> Homo sapiens

<400> 639
 Thr Trp Gly Gln Thr Pro Cys Ser Pro Gly His Gly Gln Arg Pro Ser
 1 5 10 15
 Ser Thr Cys Leu Thr Val Gly Pro Gly Gly Gly Pro Ser Leu Gly Arg
 20 25 30
 Pro Cys Pro Gln Leu Leu Leu Gln Phe Gly Val Leu Phe Cys Thr Ile
 35 40 45

597

Leu	Leu	Leu	Leu	Trp	Val	Ser	Val	Phe	Leu	Tyr	Gly	Ser	Phe	Tyr	Tyr	50	55	60	
Ser	Tyr	Met	Pro	Thr	Val	Ser	His	Leu	Ser	Pro	Val	His	Phe	Tyr	Tyr	65	70	75	80
Arg	Thr	Asp	Cys	Asp	Ser	Ser	Thr	Thr	Ser	Leu	Cys	Ser	Phe	Pro	Val	85	90	95	
Ala	Asn	Val	Ser	Leu	Thr	Lys	Gly	Gly	Arg	Asp	Arg	Val	Leu	Met	Tyr	100	105	110	
Gly	Gln	Pro	Tyr	Arg	Val	Thr	Leu	Glu	Leu	Glu	Leu	Pro	Glu	Ser	Pro	115	120	125	
Val	Asn	Gln	Asp	Leu	Gly	Met	Phe	Leu	Val	Thr	Ile	Ser	Cys	Tyr	Thr	130	135	140	
Arg	Gly	Gly	Arg	Ile	Ile	Ser	Thr	Ser	Ser	Arg	Ser	Val	Met	Leu	His	145	150	155	160
Tyr	Arg	Ser	Asp	Leu	Leu	Gln	Met	Leu	Asp	Thr	Leu	Val	Phe	Ser	Ser	165	170	175	
Leu	Leu	Leu	Phe	Gly	Phe	Ala	Glu	Gln	Lys	Gln	Leu	Leu	Glu	Val	Glu	180	185	190	
Leu	Tyr	Ala	Asp	Tyr	Arg	Glu	Asn	Ser	Tyr	Val	Pro	Thr	Thr	Gly	Ala	195	200	205	
Ile	Ile	Glu	Ile	His	Ser	Lys	Arg	Ile	Gln	Leu	Tyr	Gly	Ala	Tyr	Leu	210	215	220	
Arg	Ile	His	Ala	His	Phe	Thr	Gly	Leu	Arg	Tyr	Leu	Leu	Tyr	Asn	Phe	225	230	235	240
Pro	Met	Thr	Cys	Ala	Phe	Ile	Gly	Val	Ala	Ser	Asn	Phe	Thr	Phe	Leu	245	250	255	
Ser	Val	Ile	Val	Leu	Phe	Ser	Tyr	Met	Gln	Trp	Val	Trp	Gly	Gly	Ile	260	265	270	
Trp	Pro	Arg	His	Arg	Phe	Ser	Leu	Gln	Val	Asn	Ile	Arg	Lys	Arg	Asp	275	280	285	
Asn	Ser	Arg	Lys	Glu	Val	Gln	Arg	Arg	Ile	Ser	Ala	His	Gln	Pro	Gly	290	295	300	
Pro	Glu	Gly	Gln	Glu	Glu	Ser	Thr	Pro	Gln	Ser	Asp	Val	Thr	Glu	Asp	305	310	315	320

598

Gly Glu Ser Pro Glu Asp Pro Ser Gly Thr Glu Gly Gln Leu Ser Glu
325 330 335

Glu Glu Lys Pro Asp Gln Gln Pro Leu Ser Gly Glu Glu Glu Leu Glu
340 345 350

Pro Glu Ala Ser Asp Gly Ser Gly Ser Trp Glu Asp Ala Ala Leu Leu
355 360 365

Thr Glu Ala Asn Leu Pro Ala Pro Ala Pro Ala Ser Ala Ser Ala Pro
370 375 380

Val Leu Glu Thr Leu Gly Ser Ser Glu Pro Ala Gly Gly Ala Leu Arg
385 390 395 400

Gln Arg Pro Thr Cys Ser Ser Ser
405

<210> 640

<211> 288

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (268)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (271)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (273)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

599

<221> SITE
 <222> (274)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (276)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (286)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 640
 Phe Ser Ser Ser Ala Cys Pro Ser Val Xaa Ser Leu Phe Val Xaa Leu
 1 5 10 15
 Gly Lys Asn Pro His Asp Ala Gln Gly His Pro Arg Ala Ser Glu Asp
 20 25 30
 Gln Pro Ser Ser Gly Lys Pro Val Thr Ser Tyr Pro Gly Glu Cys Gly
 35 40 45
 Phe Val Phe Thr Lys Glu Ala Ser Leu Glu Ile Arg Asp Met Leu Leu
 50 55 60
 Ala Asn Lys Val Pro Ala Ala Ala Arg Ala Gly Ala Ile Ala Pro Cys
 65 70 75 80
 Glu Val Thr Val Pro Ala Gln Asn Thr Gly Leu Gly Pro Glu Lys Thr
 85 90 95
 Ser Phe Phe Gln Ala Leu Gly Ile Thr Thr Lys Ile Ser Arg Gly Thr
 100 105 110
 Ile Glu Ile Leu Ser Asp Val Gln Leu Ile Lys Thr Gly Asp Lys Val
 115 120 125
 Gly Ala Ser Glu Ala Thr Leu Leu Asn Met Leu Asn Ile Ser Pro Phe
 130 135 140
 Ser Phe Gly Leu Ile Ile Gln Gln Val Phe Asp Asn Gly Ser Ile Tyr
 145 150 155 160
 Asn Pro Glu Val Leu Asp Ile Thr Glu Glu Thr Leu His Ser Arg Phe
 165 170 175
 Leu Glu Gly Val Arg Asn Val Ala Ser Val Cys Leu Gln Ile Gly Tyr
 180 185 190

600

Pro Thr Val Ala Ser Val Pro His Ser Ile Ile Asn Gly Tyr Lys Arg
 195 200 205

Val Leu Ala Leu Ser Val Glu Thr Asp Tyr Thr Phe Pro Leu Ala Glu
 210 215 220

Lys Val Lys Ala Phe Leu Ala Asp Pro Ser Ala Phe Val Ala Ala Ala
 225 230 235 240

Pro Val Ala Ala Ala Thr Thr Ala Ala Pro Ala Ala Ala Ala Ala Pro
 245 250 255

Ala Lys Val Glu Ala Lys Glu Glu Ser Glu Glu Xaa Asp Glu Xaa Ile
 260 265 270

Xaa Xaa Ser Xaa Ile Ser Lys Ser Asn Asn Ser Ser Gln Xaa Ile Val
 275 280 285

<210> 641

<211> 444

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (34)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 641

Asn Glu Gln Asp Asn Cys Val Leu Ile His Asp Val Asp Gln Arg Asn
 1 5 10 15

Ser Asp Lys Asp Ile Phe Gly Asp Ala Cys Asp Asn Cys Leu Ser Val
 20 25 30

Leu Xaa Asn Asp Gln Lys Asp Thr Asp Gly Asp Gly Arg Gly Asp Ala
 35 40 45

Cys Asp Asp Asp Met Asp Gly Asp Gly Ile Lys Asn Ile Leu Asp Asn
 50 55 60

Cys Pro Lys Phe Pro Asn Arg Asp Gln Arg Asp Lys Asp Gly Asp Gly
 65 70 75 80

Val Gly Asp Ala Cys Asp Ser Cys Pro Asp Val Ser Asn Pro Asn Gln
 85 90 95

601

Ser Asp Val Asp Asn Asp Leu Val Gly Asp Ser Cys Asp Thr Asn Gln
 100 105 110

Asp Ser Asp Gly Asp Gly His Gln Asp Ser Thr Asp Asn Cys Pro Thr
 115 120 125

Val Ile Asn Ser Ala Gln Leu Asp Thr Asp Lys Asp Gly Ile Gly Asp
 130 135 140

Glu Cys Asp Asp Asp Asp Asn Asp Gly Ile Pro Asp Leu Val Pro
 145 150 155 160

Pro Gly Pro Asp Asn Cys Arg Leu Val Pro Asn Pro Ala Gln Glu Asp
 165 170 175

Ser Asn Ser Asp Gly Val Gly Asp Ile Cys Glu Ser Asp Phe Asp Gln
 180 185 190

Asp Gln Val Ile Asp Arg Ile Asp Val Cys Pro Glu Asn Ala Glu Val
 195 200 205

Thr Leu Thr Asp Phe Arg Ala Tyr Gln Thr Val Val Leu Asp Pro Glu
 210 215 220

Gly Asp Ala Gln Ile Asp Pro Asn Trp Val Val Leu Asn Gln Gly Met
 225 230 235 240

Glu Ile Val Gln Thr Met Asn Ser Asp Pro Gly Leu Ala Val Gly Tyr
 245 250 255

Thr Ala Phe Asn Gly Val Asp Phe Glu Gly Thr Phe His Val Asn Thr
 260 265 270

Gln Thr Asp Asp Asp Tyr Ala Gly Phe Ile Phe Gly Tyr Gln Asp Ser
 275 280 285

Ser Ser Phe Tyr Val Val Met Trp Lys Gln Thr Glu Gln Thr Tyr Trp
 290 295 300

Gln Ala Thr Pro Phe Arg Ala Val Ala Glu Pro Gly Ile Gln Leu Lys
 305 310 315 320

Ala Val Lys Ser Lys Thr Gly Pro Gly Glu His Leu Arg Asn Ser Leu
 325 330 335

Trp His Thr Gly Asp Thr Ser Asp Gln Val Arg Leu Leu Trp Lys Asp
 340 345 350

Ser Arg Asn Val Gly Trp Lys Asp Lys Val Ser Tyr Arg Trp Phe Leu
 355 360 365

602

Gln His Arg Pro Gln Val Gly Tyr Ile Arg Val Arg Phe Tyr Glu Gly
 370 375 380

Ser Glu Leu Val Ala Asp Ser Gly Val Thr Ile Asp Thr Thr Met Arg
 385 390 395 400

Gly Gly Arg Leu Gly Val Phe Cys Phe Ser Gln Glu Asn Ile Ile Trp
 405 410 415

Ser Asn Leu Lys Tyr Arg Cys Asn Asp Thr Ile Pro Glu Asp Phe Gln
 420 425 430

Glu Phe Gln Thr Gln Asn Phe Asp Arg Phe Asp Asn
 435 440

<210> 642
 <211> 326
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (50)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (296)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 642
 Ser Ala Arg Ala Ser Asp Leu Gly Ala Pro Arg Thr Trp Thr Gly Ala
 1 5 10 15

Ala Ala Gly Pro Arg Thr Pro Ser Ala His Ile Pro Val Pro Ala Gln
 20 25 30

Arg Ala Thr Pro Gly Lys Ala Arg Leu Asp Glu Val Met Ala Ala Ala
 35 40 45

Ala Xaa Thr Ser Leu Ser Thr Ser Pro Leu Leu Leu Gly Ala Pro Val
 50 55 60

Ala Ala Phe Ser Pro Glu Pro Gly Leu Glu Pro Trp Lys Glu Ala Leu
 65 70 75 80

Val Arg Pro Pro Gly Ser Tyr Ser Ser Ser Ser Asn Ser Gly Asp Trp
 85 90 95

603

Gly Trp Asp Leu Ala Ser Asp Gln Ser Ser Pro Ser Thr Pro Ser Pro
 100 105 110
 Pro Leu Pro Pro Glu Ala Ala His Phe Leu Phe Gly Glu Pro Thr Leu
 115 120 125
 Arg Lys Arg Lys Ser Pro Ala Gln Val Met Phe Gln Cys Leu Trp Lys
 130 135 140
 Ser Cys Gly Lys Val Leu Ser Thr Ala Ser Ala Met Gln Arg His Ile
 145 150 155 160
 Arg Leu Val His Leu Gly Arg Gln Ala Glu Pro Asp Gln Ser Asp Gly
 165 170 175
 Glu Glu Asp Phe Tyr Tyr Thr Glu Leu Asp Val Gly Val Asp Thr Leu
 180 185 190
 Thr Asp Gly Leu Ser Ser Leu Thr Pro Val Ser Pro Thr Ala Ser Met
 195 200 205
 Pro Pro Ala Phe Pro Arg Leu Glu Leu Pro Glu Leu Leu Glu Pro Pro
 210 215 220
 Ala Leu Pro Ser Pro Leu Arg Pro Pro Ala Pro Pro Leu Pro Pro Pro
 225 230 235 240
 Pro Val Leu Ser Thr Val Ala Asn Pro Gln Ser Cys His Ser Asp Arg
 245 250 255
 Val Tyr Gln Gly Cys Leu Thr Pro Ala Arg Leu Glu Pro Gln Pro Thr
 260 265 270
 Glu Val Gly Ala Cys Pro Pro Ala Leu Ser Ser Arg Ile Gly Val Thr
 275 280 285
 Leu Arg Lys Pro Arg Gly Asp Xaa Lys Lys Cys Arg Lys Val Tyr Gly
 290 295 300
 Met Glu Arg Arg Asp Leu Trp Cys Thr Ala Cys Arg Trp Lys Lys Ala
 305 310 315 320
 Cys Gln Arg Phe Leu Asp
 325

<210> 643

<211> 129

<212> PRT

604

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (19)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 643

Asp Val Arg Leu Ser Gly Arg Asn Xaa Xaa Val Asp Val Xaa Asp His

1

5

10

15

605

Gln Xaa Xaa Leu Leu Glu Gln Xaa Asp Leu Leu Ala Gly Leu Ile Ser
 20 25 30
 Asn Ser Ser Asp Ala Xaa Asp Lys Ile Arg Tyr Glu Ser Leu Thr Asp
 35 40 45
 Pro Ser Lys Leu Asp Ser Gly Lys Glu Leu His Ile Asn Leu Ile Pro
 50 55 60
 Asn Lys Gln Asp Arg Thr Leu Thr Ile Val Gly Tyr Arg Asp Arg Met
 65 70 75 80
 Thr Lys Ala Asp Leu Ile Asn Asn Leu Gly Thr Ile Ala Xaa Ser Gly
 85 90 95
 Thr Lys Ala Phe Met Glu Xaa Leu Gln Ala Gly Ala Asp Ile Ser Met
 100 105 110
 Ile Gly Gln Phe Gly Val Gly Phe Tyr Ser Ala Tyr Leu Val Ala Arg
 115 120 125

Arg

<210> 644

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 644

Ser Thr His Ala Ser Ala Ser Arg Arg Leu Leu Xaa Asp Val Cys Gln
 1 5 10 15
 Asp Cys Ile Gln Met Val Thr Asp Ile Gln Thr Ala Val Arg Thr Asn
 20 25 30
 Ser Thr Phe Val Glu Ala Leu Val Asp His Ala Lys Ala Gln Cys Asp
 35 40 45
 Leu Leu Gly Pro Gly Met Ala Asp Met Cys Lys Asn Tyr Ile Asn Gln
 50 55 60
 Tyr Ser Asp Ile Ala Val Gln Met Met Met His Met Gln Pro Lys Glu
 65 70 75 80

606

Ile Cys Gly Leu Val Gly Phe Cys Asp Gln Val Lys Glu Met Pro Met
 85 90 95

Gln Thr Leu Ile Pro Ala Lys Ala Val Ser Glu Asn Val Ile Pro Ala
 100 105 110

Leu Glu Leu Val Glu Pro Ile Lys Lys Asp Thr Val Gln Ala Lys Thr
 115 120 125

Ser Val Ser Cys Gly Asp Met Arg Val Thr Trp Leu Lys Glu Val Ala
 130 135 140

Lys Leu His Trp Thr Thr Thr Gly Leu Arg Lys Lys
 145 150 155

<210> 645

<211> 115

<212> PRT

<213> Homo sapiens

<400> 645

Ala Asp Pro Gly Val Gly Ala Val Pro Gly Leu Ala Ala Asp Leu Ala
 1 5 10 15

Thr Ala Ala Arg Ser Leu Gly Pro Ala Leu Val Leu Asp Leu Gly Arg
 20 25 30

Pro Pro Ser Pro Asp Pro His Glu Gly Pro Ser Pro Ser Pro Arg Arg
 35 40 45

Ser Pro Asp Leu Val Arg Gly Pro Gly Pro Gly Leu Gly Pro Gly Val
 50 55 60

Leu Pro Gln Cys Pro Arg Gly Asn Pro Asn Pro Gly Arg Asp Arg Arg
 65 70 75 80

Val Pro Pro Ser Leu Leu Lys Arg Lys Glu Arg Cys Pro Leu Lys Lys
 85 90 95

Met Val Met Ser Gly Asn Pro Arg His Ile Thr Leu Ile His Lys Trp
 100 105 110

Asp Leu Gly
 115

<210> 646

607

<211> 153

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (127)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 646

Tyr	Met	Pro	Asn	Gly	Ser	Leu	Asn	Glu	Leu	Leu	His	Arg	Lys	Thr	Glu
1				5					10					15	

Tyr	Pro	Asp	Val	Ala	Trp	Pro	Leu	Arg	Phe	Arg	Ile	Leu	His	Glu	Ile
			20					25					30		

Ala	Leu	Gly	Val	Asn	Tyr	Leu	His	Asn	Met	Thr	Pro	Pro	Leu	Leu	His
		35					40					45			

His	Asp	Leu	Lys	Thr	Gln	Asn	Ile	Leu	Leu	Asp	Asn	Glu	Phe	His	Val
	50					55					60				

Lys	Ile	Ala	Asp	Phe	Gly	Leu	Ser	Lys	Trp	Arg	Met	Met	Ser	Leu	Ser
65					70					75					80

Gln	Ser	Arg	Ser	Ser	Lys	Ser	Ala	Pro	Glu	Gly	Gly	Thr	Ile	Ile	Tyr
			85						90					95	

Met	Pro	Pro	Glu	Asn	Tyr	Glu	Pro	Gly	Gln	Lys	Ser	Arg	Ala	Ser	Ile
			100					105					110		

Lys	His	Asp	Ile	Tyr	Ser	Tyr	Ala	Val	Ile	Thr	Trp	Glu	Val	Xaa	Ser
		115					120					125			

Arg	Lys	Gln	Pro	Phe	Glu	Asp	Val	Thr	Asn	Pro	Leu	Gln	Ile	Met	Tyr
	130					135					140				

Ser	Val	Ser	Gln	Gly	His	Trp	Thr	Gly
145					150			

<210> 647

<211> 220

<212> PRT

<213> Homo sapiens

<400> 647

Ala	Ser	Glu	Gln	Gly	Ala	Val	Gly	Gln	Gly	Gly	Leu	Ala	Gly	Val	Pro
1				5					10				15		

608

Thr Leu Thr Ser Leu Pro Ser Ser Cys Pro Glu Pro Arg Pro Ser Met
 20 25 30
 Asp Ala Val Asp Ala Thr Met Glu Lys Leu Arg Ala Gln Cys Leu Ser
 35 40 45
 Arg Gly Ala Ser Gly Ile Gln Gly Leu Ala Arg Phe Phe Arg Gln Leu
 50 55 60
 Asp Arg Asp Gly Ser Arg Ser Leu Asp Ala Asp Glu Phe Arg Gln Gly
 65 70 75 80
 Leu Ala Lys Leu Gly Leu Val Leu Asp Gln Ala Glu Ala Glu Gly Val
 85 90 95
 Cys Arg Lys Trp Asp Arg Asn Gly Ser Gly Thr Leu Asp Leu Glu Glu
 100 105 110
 Phe Leu Arg Ala Leu Arg Pro Pro Met Ser Gln Ala Arg Glu Ala Val
 115 120 125
 Ile Ala Ala Ala Phe Ala Lys Leu Asp Arg Ser Gly Asp Gly Val Val
 130 135 140
 Thr Val Asp Asp Leu Arg Gly Val Tyr Ser Gly Arg Ala His Pro Lys
 145 150 155 160
 Val Arg Ser Gly Glu Trp Thr Glu Asp Glu Val Leu Arg Arg Phe Leu
 165 170 175
 Asp Asn Phe Asp Ser Ser Glu Lys Asp Gly Gln Val Thr Leu Ala Glu
 180 185 190
 Phe Gln Asp Tyr Tyr Ser Gly Val Ser Ala Ser Met Asn Thr Asp Glu
 195 200 205
 Glu Phe Val Ala Met Met Thr Ser Ala Trp Gln Leu
 210 215 220

<210> 648

<211> 118

<212> PRT

<213> Homo sapiens

<400> 648

Asp Asn Arg Thr Leu Thr Lys Gly Pro Asp Thr Val Gly Thr Met Gly
 1 5 10 15

Gln Cys Arg Ser Ala Asn Ala Glu Asp Ala Gln Glu Phe Ser Asp Val

609

	20		25		30
Glu Arg Ala Ile Glu Thr Leu Ile Lys Asn Phe His Gln Tyr Ser Val					
	35		40		45
Glu Gly Gly Lys Glu Thr Leu Thr Pro Ser Glu Leu Arg Asp Leu Val					
	50		55		60
Thr Gln Gln Leu Pro His Leu Met Pro Ser Asn Cys Gly Leu Glu Glu					
	65		70		75
Lys Ile Ala Asn Leu Gly Ser Cys Asn Asp Ser Lys Leu Glu Phe Arg					
		85		90	95
Ser Phe Trp Glu Leu Ile Gly Glu Ala Ala Lys Ser Val Lys Leu Glu					
	100		105		110
Arg Pro Val Arg Gly His					
	115				

<210> 649

<211> 309

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (77)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 649

Asp His His Gln Gly Ala Glu Ser Val Pro Gly Ile Gly Val Ser Pro					
1		5		10	15
Thr Ser Ser Ser Ser Cys Pro Pro Thr Ser Cys Thr Gln Pro Val Thr					
	20		25		30
Thr Trp Ser Pro Gly Leu Arg Val Glu Ser Leu Asp Gly Ala Lys Thr					
	35		40		45
Gly Lys Gly Ala Leu Thr Gly Ala Pro Gly Ser Phe Gly Ser Ser Glu					
	50		55		60
Phe Leu Thr Gly Leu Arg Asn Thr Ser Glu Ala Arg Xaa Thr Arg Gly					

610

65					70					75				80	
Pro	Ile	Met	Gln	Glu	Pro	Arg	Arg	Val	Thr	Pro	Cys	Leu	Gly	Lys	Arg
				85					90					95	
Gly	Val	Lys	Thr	Pro	Gln	Leu	Gln	Pro	Gly	Ser	Ala	Phe	Leu	Pro	Arg
			100					105					110		
Val	Arg	Arg	Gln	Ser	Phe	Pro	Ala	Arg	Ser	Asp	Ser	Tyr	Thr	Thr	Val
			115				120					125			
Arg	Asp	Phe	Leu	Ala	Val	Pro	Arg	Thr	Ile	Ser	Ser	Ala	Ser	Ala	Thr
	130						135				140				
Leu	Ile	Met	Ala	Val	Ala	Val	Ser	His	Phe	Arg	Pro	Gly	Pro	Glu	Xaa
145					150					155					160
Trp	Asp	Thr	Ala	Ser	Met	Ala	Ala	Ser	Lys	Val	Lys	Gln	Asp	Met	Pro
				165					170					175	
Pro	Pro	Gly	Gly	Tyr	Gly	Pro	Ile	Asp	Tyr	Lys	Arg	Asn	Leu	Pro	Arg
			180					185					190		
Arg	Gly	Leu	Ser	Gly	Tyr	Ser	Met	Leu	Ala	Ile	Gly	Ile	Gly	Thr	Leu
		195					200					205			
Ile	Tyr	Gly	His	Trp	Ser	Ile	Met	Lys	Trp	Asn	Arg	Glu	Arg	Arg	Arg
	210					215					220				
Leu	Gln	Ile	Glu	Asp	Phe	Glu	Ala	Arg	Ile	Ala	Leu	Leu	Pro	Leu	Leu
225					230					235					240
Gln	Ala	Glu	Thr	Asp	Arg	Arg	Thr	Leu	Gln	Met	Leu	Arg	Glu	Asn	Leu
				245					250					255	
Glu	Glu	Glu	Ala	Ile	Ile	Met	Lys	Asp	Val	Pro	Asp	Trp	Lys	Val	Gly
			260					265					270		
Glu	Ser	Val	Phe	His	Thr	Thr	Arg	Trp	Val	Pro	Pro	Leu	Ile	Gly	Glu
		275					280					285			
Leu	Tyr	Gly	Leu	Arg	Thr	Thr	Glu	Glu	Ala	Leu	His	Ala	Ser	His	Gly
	290					295					300				
Phe	Met	Trp	Tyr	Thr											
305															

<210> 650

<211> 286

611

<212> PRT

<213> Homo sapiens

<400> 650

Ile	Pro	Thr	Leu	Ile	Thr	Ala	Phe	Val	Leu	Ala	Thr	Ser	Gln	Ala	Gln
1				5					10					15	

Ala	Gly	Trp	Leu	Gln	His	Asp	Tyr	Gly	His	Leu	Ser	Val	Tyr	Arg	Lys
			20					25					30		

Pro	Lys	Trp	Asn	His	Leu	Val	His	Lys	Phe	Val	Ile	Gly	His	Leu	Lys
	35						40					45			

Gly	Ala	Ser	Ala	Asn	Trp	Trp	Asn	His	Arg	His	Phe	Gln	His	His	Ala
	50					55					60				

Lys	Pro	Asn	Ile	Phe	His	Lys	Asp	Pro	Asp	Val	Asn	Met	Leu	His	Val
65					70					75				80	

Phe	Val	Leu	Gly	Glu	Trp	Gln	Pro	Ile	Glu	Tyr	Gly	Lys	Lys	Lys	Leu
				85					90					95	

Lys	Tyr	Leu	Pro	Tyr	Asn	His	Gln	His	Glu	Tyr	Phe	Phe	Leu	Ile	Gly
			100					105						110	

Pro	Pro	Leu	Leu	Ile	Pro	Met	Tyr	Phe	Gln	Tyr	Gln	Ile	Ile	Met	Thr
		115					120						125		

Met	Ile	Val	His	Lys	Asn	Trp	Val	Asp	Leu	Ala	Trp	Ala	Val	Ser	Tyr
	130					135						140			

Tyr	Ile	Arg	Phe	Phe	Ile	Thr	Tyr	Ile	Pro	Phe	Tyr	Gly	Ile	Leu	Gly
145					150					155					160

Ala	Leu	Leu	Phe	Leu	Asn	Phe	Ile	Arg	Phe	Leu	Glu	Ser	His	Trp	Phe
				165					170					175	

Val	Trp	Val	Thr	Gln	Met	Asn	His	Ile	Val	Met	Glu	Ile	Asp	Gln	Glu
			180					185					190		

Ala	Tyr	Arg	Asp	Trp	Phe	Ser	Ser	Gln	Leu	Thr	Ala	Thr	Cys	Asn	Val
		195					200					205			

Glu	Gln	Ser	Phe	Phe	Asn	Asp	Trp	Phe	Ser	Gly	His	Leu	Asn	Phe	Gln
	210					215					220				

Ile	Glu	His	His	Leu	Phe	Pro	Thr	Met	Pro	Arg	His	Asn	Leu	His	Lys
225					230					235					240

Ile	Ala	Pro	Leu	Val	Lys	Ser	Leu	Cys	Ala	Lys	His	Gly	Ile	Glu	Tyr
				245					250					255	

612

Gln Glu Lys Pro Leu Leu Arg Ala Leu Leu Asp Ile Ile Arg Ser Leu
 260 265 270

Lys Lys Ser Gly Lys Leu Trp Leu Asp Ala Tyr Leu His Lys
 275 280 285

<210> 651

<211> 184

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (35)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (57)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (106)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 651

Glu Arg Gly Pro Ile Pro Val Cys Pro His Lys Ala Ala Ser Ser Val
 1 5 10 15

Ile Ser Leu Leu Arg Ala Glu Leu Arg Leu Tyr Thr Asp Pro His Lys
 20 25 30

Tyr His Xaa Phe Cys Leu Arg Lys Asp Lys Ala His Val Cys Phe Cys
 35 40 45

Phe Arg Phe Leu Phe Ser Phe Phe Xaa Glu Ala Leu Trp Arg Ser Met
 50 55 60

Phe Leu Leu Ser Phe Leu Xaa Lys Pro Ser Phe Trp Ala Thr Gly Leu
 65 70 75 80

Ile Leu Ser Thr Ser Ser Phe Pro Pro Phe Ser Ile Val Ser Leu Pro

613

	85		90		95
Pro Ser His	Pro Thr Arg	Ala Pro Leu	Xaa Leu Ser	Phe Pro Ser	Ser
	100		105		110
Pro Ala Val	Ser Phe Leu	Arg Ser Gly	Thr Lys Leu	Ile Phe Arg	Arg
	115		120		125
Arg Pro Arg	Gln Lys Glu	Ala Gly Leu	Ser Gln Ser	His Asp Asp	Leu
	130		135		140
Ser Asn Ala	Thr Ala Thr	Pro Ser Val	Arg Lys Lys	Ala Gly Ser	Phe
	145		150		155
Ser Arg Arg	Leu Ile Lys	Arg Phe Ser	Phe Lys Ser	Lys Pro Lys	Ala
	165		170		175
Asn Gly Asn	Pro Ser Pro	Gln Leu			
	180				

<210> 652

<211> 641

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (438)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 652

Gln Gly Ser	Glu Pro Ser	Ser Ser Glu	Asn Ala Asn	Asp Thr Ile	Ile Leu
1		5		10	15
Arg Asn Leu	Asn Pro His	Ser Thr Met	Asp Ser Ile	Leu Gly Ala	Leu
	20		25		30
Ala Pro Tyr	Ala Val Leu	Ser Ser Ser	Asn Val Arg	Val Ile Lys	Asp
	35		40		45
Lys Gln Thr	Gln Leu Asn	Arg Gly Phe	Ala Phe Ile	Gln Leu Ser	Thr
	50		55		60
Ile Glu Ala	Ala Gln Leu	Leu Gln Ile	Leu Gln Ala	Leu His Pro	Pro
	65		70		75
Leu Thr Ile	Asp Gly Lys	Thr Ile Asn	Val Glu Phe	Ala Lys Gly	Ser
	85		90		95

614

Lys Arg Asp Met Ala Ser Asn Glu Gly Ser Arg Ile Ser Ala Ala Ser
 100 105 110
 Val Ala Ser Thr Ala Ile Ala Ala Ala Gln Trp Ala Ile Ser Gln Ala
 115 120 125
 Ser Gln Gly Gly Glu Gly Thr Trp Ala Thr Ser Glu Glu Pro Pro Val
 130 135 140
 Asp Tyr Ser Tyr Tyr Gln Gln Asp Glu Gly Tyr Gly Asn Ser Gln Gly
 145 150 155 160
 Thr Glu Ser Ser Leu Tyr Ala His Gly Tyr Leu Lys Gly Thr Lys Gly
 165 170 175
 Pro Gly Ile Thr Gly Thr Lys Gly Asp Pro Thr Gly Ala Gly Pro Glu
 180 185 190
 Ala Ser Leu Glu Pro Gly Ala Asp Ser Val Ser Met Gln Ala Phe Ser
 195 200 205
 Arg Ala Gln Pro Gly Ala Ala Pro Gly Ile Tyr Gln Gln Ser Ala Glu
 210 215 220
 Ala Ser Ser Ser Gln Gly Thr Ala Ala Asn Ser Gln Ser Tyr Thr Ile
 225 230 235 240
 Met Ser Pro Ala Val Leu Lys Ser Glu Leu Gln Ser Pro Thr His Pro
 245 250 255
 Ser Ser Ala Leu Pro Pro Ala Thr Ser Pro Thr Ala Gln Glu Ser Tyr
 260 265 270
 Ser Gln Tyr Pro Val Pro Asp Val Ser Thr Tyr Gln Tyr Asp Glu Thr
 275 280 285
 Ser Gly Tyr Tyr Tyr Asp Pro Gln Thr Gly Leu Tyr Tyr Asp Pro Asn
 290 295 300
 Ser Gln Tyr Tyr Tyr Asn Ala Gln Ser Gln Gln Tyr Leu Tyr Trp Asp
 305 310 315 320
 Gly Glu Arg Arg Thr Tyr Val Pro Ala Leu Glu Gln Ser Ala Asp Gly
 325 330 335
 His Lys Glu Thr Gly Ala Pro Ser Lys Glu Gly Lys Glu Lys Lys Glu
 340 345 350
 Lys His Lys Thr Lys Thr Ala Gln Gln Ile Ala Lys Asp Met Glu Arg
 355 360 365

615

Trp	Ala	Arg	Ser	Leu	Asn	Lys	Gln	Lys	Glu	Asn	Phe	Lys	Asn	Ser	Phe	370	375	380	
Gln	Pro	Ile	Ser	Ser	Leu	Arg	Asp	Asp	Glu	Arg	Arg	Glu	Ser	Ala	Thr	385	390	395	400
Ala	Asp	Ala	Gly	Tyr	Ala	Ile	Leu	Glu	Lys	Lys	Gly	Ala	Leu	Ala	Glu	405	410	415	
Arg	Gln	His	Thr	Ser	Met	Asp	Leu	Pro	Lys	Leu	Ala	Ser	Asp	Asp	Arg	420	425	430	
Pro	Ser	Pro	Pro	Arg	Xaa	Leu	Val	Ala	Ala	Tyr	Ser	Gly	Glu	Ser	Asp	435	440	445	
Ser	Glu	Glu	Glu	Gln	Glu	Arg	Gly	Gly	Pro	Glu	Arg	Glu	Glu	Lys	Leu	450	455	460	
Thr	Asp	Trp	Gln	Lys	Leu	Ala	Cys	Leu	Leu	Cys	Arg	Arg	Gln	Phe	Pro	465	470	475	480
Ser	Lys	Glu	Ala	Leu	Ile	Arg	His	Gln	Gln	Leu	Ser	Gly	Leu	His	Lys	485	490	495	
Gln	Asn	Leu	Glu	Ile	His	Arg	Arg	Ala	His	Leu	Ser	Glu	Asn	Glu	Leu	500	505	510	
Glu	Ala	Leu	Glu	Lys	Asn	Asp	Met	Glu	Gln	Met	Lys	Tyr	Arg	Asp	Arg	515	520	525	
Ala	Ala	Glu	Arg	Arg	Glu	Lys	Tyr	Gly	Ile	Pro	Glu	Pro	Pro	Glu	Pro	530	535	540	
Lys	Arg	Arg	Lys	Tyr	Gly	Gly	Ile	Ser	Thr	Ala	Ser	Val	Asp	Phe	Glu	545	550	555	560
Gln	Pro	Thr	Arg	Asp	Gly	Leu	Gly	Ser	Asp	Asn	Ile	Gly	Ser	Arg	Met	565	570	575	
Leu	Gln	Ala	Met	Gly	Trp	Lys	Glu	Gly	Ser	Gly	Leu	Gly	Arg	Lys	Lys	580	585	590	
Gln	Gly	Ile	Val	Thr	Pro	Ile	Glu	Ala	Gln	Thr	Arg	Val	Arg	Gly	Ser	595	600	605	
Gly	Leu	Gly	Ala	Arg	Gly	Ser	Ser	Tyr	Gly	Val	Thr	Ser	Thr	Glu	Ser	610	615	620	
Tyr	Lys	Glu	Thr	Leu	His	Lys	Thr	Met	Val	Thr	Arg	Phe	Asn	Glu	Ala	625	630	635	640

616

Gln

<210> 653
 <211> 516
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (247)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 653
 Xaa Thr Arg Pro Gly Arg Gln Thr Arg Leu Cys Arg Pro Ala Ile Ser
 1 5 10 15
 Leu Leu Trp Leu Val Thr Pro Gly Val Pro Ala Phe Ser Gly Trp Gly
 20 25 30
 Arg Arg His Arg Gly Arg Thr Gly Arg Arg Ala Met Ala Ser Cys Val
 35 40 45
 Gly Ser Arg Thr Leu Ser Lys Asp Asp Val Asn Tyr Lys Met His Phe
 50 55 60
 Arg Met Ile Asn Glu Gln Gln Val Glu Asp Ile Thr Ile Asp Phe Phe
 65 70 75 80
 Tyr Arg Pro His Thr Ile Thr Leu Leu Ser Phe Thr Ile Val Ser Leu
 85 90 95
 Met Tyr Phe Ala Phe Thr Arg Asp Asp Ser Val Pro Glu Asp Asn Ile
 100 105 110
 Trp Arg Gly Ile Leu Ser Val Ile Phe Phe Phe Leu Ile Ile Ser Val
 115 120 125
 Leu Ala Phe Pro Asn Gly Pro Phe Thr Arg Pro His Pro Ala Leu Trp
 130 135 140
 Arg Met Val Phe Gly Leu Ser Val Leu Tyr Phe Leu Phe Leu Val Phe
 145 150 155 160

617

Leu	Leu	Phe	Leu	Asn	Phe	Glu	Gln	Val	Lys	Ser	Leu	Met	Tyr	Trp	Leu	165	170	175	
Asp	Pro	Asn	Leu	Arg	Tyr	Ala	Thr	Arg	Glu	Ala	Asp	Val	Met	Glu	Tyr	180	185	190	
Ala	Val	Asn	Cys	His	Val	Ile	Thr	Trp	Glu	Arg	Ile	Ile	Ser	His	Phe	195	200	205	
Asp	Ile	Phe	Ala	Phe	Gly	His	Phe	Trp	Gly	Trp	Ala	Met	Lys	Ala	Leu	210	215	220	
Leu	Ile	Arg	Ser	Tyr	Gly	Leu	Cys	Trp	Thr	Ile	Ser	Ile	Thr	Trp	Glu	225	230	235	240
Leu	Thr	Glu	Leu	Phe	Phe	Xaa	His	Leu	Leu	Pro	Asn	Phe	Ala	Glu	Cys	245	250	255	
Trp	Trp	Asp	Gln	Val	Ile	Leu	Asp	Ile	Leu	Leu	Cys	Asn	Gly	Gly	Gly	260	265	270	
Ile	Trp	Leu	Gly	Met	Val	Val	Cys	Arg	Phe	Leu	Glu	Met	Arg	Thr	Tyr	275	280	285	
His	Trp	Ala	Ser	Phe	Lys	Asp	Ile	His	Thr	Thr	Thr	Gly	Lys	Ile	Lys	290	295	300	
Arg	Ala	Val	Leu	Gln	Phe	Thr	Pro	Ala	Ser	Trp	Thr	Tyr	Val	Arg	Trp	305	310	315	320
Phe	Asp	Pro	Lys	Ser	Ser	Phe	Gln	Arg	Val	Ala	Gly	Val	Tyr	Leu	Phe	325	330	335	
Met	Ile	Ile	Trp	Gln	Leu	Thr	Glu	Leu	Asn	Thr	Phe	Phe	Leu	Lys	His	340	345	350	
Ile	Phe	Val	Phe	Gln	Ala	Ser	His	Pro	Leu	Ser	Trp	Gly	Arg	Ile	Leu	355	360	365	
Phe	Ile	Gly	Gly	Ile	Thr	Ala	Pro	Thr	Val	Arg	Gln	Tyr	Tyr	Ala	Tyr	370	375	380	
Leu	Thr	Asp	Thr	Gln	Cys	Lys	Arg	Val	Gly	Thr	Gln	Cys	Trp	Val	Phe	385	390	395	400
Gly	Val	Ile	Gly	Phe	Leu	Glu	Ala	Ile	Val	Cys	Ile	Lys	Phe	Gly	Gln	405	410	415	
Asp	Leu	Phe	Ser	Lys	Thr	Gln	Ile	Leu	Tyr	Val	Val	Leu	Trp	Leu	Leu	420	425	430	

618

Cys Val Ala Phe Thr Thr Phe Leu Cys Leu Tyr Gly Met Ile Trp Tyr
 435 440 445
 Ala Glu His Tyr Gly His Arg Glu Lys Thr Tyr Ser Glu Cys Glu Asp
 450 455 460
 Gly Thr Tyr Ser Pro Glu Ile Ser Trp His His Arg Lys Gly Thr Lys
 465 470 475 480
 Gly Ser Glu Asp Ser Pro Pro Lys His Ala Gly Asn Asn Glu Ser His
 485 490 495
 Ser Ser Arg Arg Arg Asn Arg His Ser Lys Ser Lys Val Thr Asn Gly
 500 505 510
 Val Gly Lys Lys
 515

<210> 654
 <211> 663
 <212> PRT
 <213> Homo sapiens

<400> 654
 Leu Glu Cys Arg Glu Ala His Ile Arg Asp Val Pro Val Val Arg Leu
 1 5 10 15
 Pro Ala Asp Ser Pro Ile Pro Glu Arg Gly Asp Leu Ser Cys Arg Met
 20 25 30
 His Thr Cys Phe Asp Val Tyr Arg Cys Gly Phe Asn Pro Lys Asn Lys
 35 40 45
 Ile Lys Val Tyr Ile Tyr Ala Leu Lys Lys Tyr Val Asp Asp Phe Gly
 50 55 60
 Val Ser Val Ser Asn Thr Ile Ser Arg Glu Tyr Asn Glu Leu Leu Met
 65 70 75 80
 Ala Ile Ser Asp Ser Asp Tyr Tyr Thr Asp Asp Ile Asn Arg Ala Cys
 85 90 95
 Leu Phe Val Pro Ser Ile Asp Val Leu Asn Gln Asn Thr Leu Arg Ile
 100 105 110
 Lys Glu Thr Ala Gln Ala Met Ala Gln Leu Ser Arg Trp Asp Arg Gly
 115 120 125
 Thr Asn His Leu Leu Phe Asn Met Leu Pro Gly Gly Pro Pro Asp Tyr

619

130	135	140
Asn Thr Ala Leu Asp Val Pro Arg Asp Arg Ala Leu Leu Ala Gly Gly		
145	150	155 160
Gly Phe Ser Thr Trp Thr Tyr Arg Gln Gly Tyr Asp Val Ser Ile Pro		
	165	170 175
Val Tyr Ser Pro Leu Ser Ala Glu Val Asp Leu Pro Glu Lys Gly Pro		
	180	185 190
Gly Pro Arg Gln Tyr Phe Leu Leu Ser Ser Gln Val Gly Leu His Pro		
	195	200 205
Glu Tyr Arg Glu Asp Leu Glu Ala Leu Gln Val Lys His Gly Glu Ser		
	210	215 220
Val Leu Val Leu Asp Lys Cys Thr Asn Leu Ser Glu Gly Val Leu Ser		
	225	230 235 240
Val Arg Lys Arg Cys His Lys His Gln Val Phe Asp Tyr Pro Gln Val		
	245	250 255
Leu Gln Glu Ala Thr Phe Cys Val Val Leu Arg Gly Ala Arg Leu Gly		
	260	265 270
Gln Ala Val Leu Ser Asp Val Leu Gln Ala Gly Cys Val Pro Val Val		
	275	280 285
Ile Ala Asp Ser Tyr Ile Leu Pro Phe Ser Glu Val Leu Asp Trp Lys		
	290	295 300
Arg Ala Ser Val Val Val Pro Glu Glu Lys Met Ser Asp Val Tyr Ser		
	305	310 315 320
Ile Leu Gln Ser Ile Pro Gln Arg Gln Ile Glu Glu Met Gln Arg Gln		
	325	330 335
Ala Arg Trp Phe Trp Glu Ala Tyr Phe Gln Ser Ile Lys Ala Ile Ala		
	340	345 350
Leu Ala Thr Leu Gln Ile Ile Asn Asp Arg Ile Tyr Pro Tyr Ala Ala		
	355	360 365
Ile Ser Tyr Glu Glu Trp Asn Asp Pro Pro Ala Val Lys Trp Gly Ser		
	370	375 380
Val Ser Asn Pro Leu Phe Leu Pro Leu Ile Pro Pro Gln Ser Gln Gly		
	385	390 395 400
Phe Thr Ala Ile Val Leu Thr Tyr Asp Arg Val Glu Ser Leu Phe Arg		

620

	405		410		415
Val Ile Thr Glu Val Ser Lys Val Pro Ser Leu Ser Lys Leu Leu Val					
	420		425		430
Val Trp Asn Asn Gln Asn Lys Asn Pro Pro Glu Asp Ser Leu Trp Pro					
	435		440		445
Lys Ile Arg Val Pro Leu Lys Val Val Arg Thr Ala Glu Asn Lys Leu					
	450		455		460
Ser Asn Arg Phe Phe Pro Tyr Asp Glu Ile Glu Thr Glu Ala Val Leu					
	465		470		475
Ala Ile Asp Asp Asp Ile Ile Met Leu Thr Ser Asp Glu Leu Gln Phe					
	485		490		495
Gly Tyr Glu Val Trp Arg Glu Phe Pro Asp Arg Leu Val Gly Tyr Pro					
	500		505		510
Gly Arg Leu His Leu Trp Asp His Glu Met Asn Lys Trp Lys Tyr Glu					
	515		520		525
Ser Glu Trp Thr Asn Glu Val Ser Met Val Leu Thr Gly Ala Ala Phe					
	530		535		540
Tyr His Lys Tyr Phe Asn Tyr Leu Tyr Thr Tyr Lys Met Pro Gly Asp					
	545		550		555
Ile Lys Asn Trp Val Asp Ala His Met Asn Cys Glu Asp Ile Ala Met					
	565		570		575
Asn Phe Leu Val Ala Asn Val Thr Gly Lys Ala Val Ile Lys Val Thr					
	580		585		590
Pro Arg Lys Lys Phe Lys Cys Pro Glu Cys Thr Ala Ile Asp Gly Leu					
	595		600		605
Ser Leu Asp Gln Thr His Met Val Glu Arg Ser Glu Cys Ile Asn Lys					
	610		615		620
Phe Ala Ser Val Phe Gly Thr Met Pro Leu Lys Val Val Glu His Arg					
	625		630		635
Ala Asp Pro Val Leu Tyr Lys Asp Asp Phe Pro Glu Lys Leu Lys Ser					
	645		650		655
Phe Pro Asn Ile Gly Ser Leu					
	660				

621

<210> 655
 <211> 97
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (38)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (91)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 655
 Ala Thr Gln Leu Leu Ser Ser Phe Ser Val Gly Pro Leu Leu Gln Ile
 1 5 10 15
 Thr Phe Tyr Glu Asp Lys Asn Phe Gln Gly Arg Arg Tyr Asp Cys Asp
 20 25 30
 Cys Asp Cys Ala Asp Xaa His Thr Tyr Leu Ser Arg Cys Asn Ser Ile
 35 40 45
 Lys Val Glu Gly Gly Thr Trp Ala Val Tyr Glu Arg Pro Asn Phe Ala
 50 55 60
 Gly Tyr Met Tyr Ile Leu Pro Gln Gly Glu Tyr Pro Glu Tyr Gln Arg
 65 70 75 80
 Trp Met Gly Leu Asn Asp Arg Leu Ser Ser Xaa Arg Ala Val Ser Ser
 85 90 95

Ala

<210> 656
 <211> 167
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (59)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>

622

<221> SITE

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 656

Asp	Ala	Asp	Leu	Val	Ile	Trp	Asp	Pro	Asp	Ser	Val	Lys	Thr	Ile	Ser
1				5				10						15	

Ala	Lys	Thr	His	Asn	Ser	Ser	Leu	Glu	Tyr	Asn	Ile	Phe	Glu	Gly	Met
			20					25					30		

Glu	Cys	Arg	Gly	Ser	Pro	Leu	Val	Val	Ile	Ser	Gln	Gly	Lys	Ile	Val
		35					40					45			

Leu	Glu	Asp	Gly	Thr	Leu	His	Val	Thr	Glu	Xaa	Ser	Gly	Arg	Tyr	Ile
	50					55					60				

Pro	Arg	Lys	Pro	Phe	Pro	Asp	Phe	Xaa	Tyr	Lys	Arg	Ile	Lys	Ala	Arg
65					70					75					80

Ser	Arg	Leu	Ala	Glu	Leu	Arg	Gly	Val	Pro	Arg	Gly	Leu	Tyr	Asp	Gly
				85					90					95	

Pro	Val	Cys	Glu	Val	Ser	Val	Thr	Pro	Lys	Thr	Val	Thr	Pro	Ala	Ser
			100					105					110		

Ser	Ala	Lys	Thr	Ser	Pro	Ala	Lys	Gln	Gln	Ala	Pro	Pro	Val	Arg	Asn
		115					120						125		

Leu	His	Gln	Ser	Gly	Phe	Ser	Leu	Ser	Gly	Ala	Gln	Ile	Asp	Asp	Asn
	130						135					140			

Ile	Pro	Arg	Arg	Thr	Thr	Gln	Arg	Ile	Val	Ala	Pro	Pro	Gly	Gly	Arg
145					150					155					160

Ala	Asn	Ile	Thr	Ser	Leu	Gly
					165	

<210> 657

<211> 176

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

623

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (26)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 657

Xaa	Ser	Leu	Asn	Leu	Xaa	Lys	Leu	Ala	Leu	His	Arg	Gly	Gly	Gly	Arg
1				5					10					15	

Ser	Arg	Thr	Ser	Gly	Ser	Pro	Gly	Leu	Xaa	Glu	Phe	Gly	Thr	Ser	Ala
			20					25					30		

Val	Leu	Leu	Arg	Leu	Gly	Asp	Glu	Leu	Glu	Met	Ile	Arg	Pro	Ser	Val
		35					40					45			

Tyr	Arg	Asn	Val	Ala	Arg	Gln	Leu	His	Ile	Ser	Leu	Gln	Ser	Glu	Pro
	50					55					60				

Val	Val	Thr	Asp	Ala	Phe	Leu	Ala	Val	Ala	Gly	His	Ile	Phe	Ser	Ala
65					70					75					80

Gly	Ile	Thr	Trp	Gly	Lys	Val	Val	Ser	Leu	Tyr	Ala	Val	Ala	Ala	Gly
				85					90					95	

Leu	Ala	Val	Asp	Cys	Val	Arg	Gln	Ala	Gln	Pro	Ala	Met	Val	His	Ala
		100						105					110		

Leu	Val	Asp	Cys	Leu	Gly	Glu	Phe	Val	Arg	Lys	Thr	Leu	Ala	Thr	Trp
		115					120					125			

Leu	Arg	Arg	Arg	Gly	Gly	Trp	Thr	Asp	Val	Leu	Lys	Cys	Val	Val	Ser
	130					135					140				

Thr	Asp	Pro	Gly	Leu	Arg	Ser	His	Trp	Leu	Val	Ala	Ala	Leu	Cys	Ser
145					150					155					160

Phe	Gly	Arg	Phe	Leu	Lys	Ala	Ala	Phe	Phe	Val	Leu	Leu	Pro	Glu	Arg
			165						170						175

<210> 658

<211> 137

<212> PRT

624

<213> Homo sapiens

<220>

<221> SITE

<222> (75)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (101)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (129)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (131)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 658

Gly	Pro	Val	Gly	Ser	Ser	Ser	Glu	Ala	Pro	Arg	Gly	Ala	Gly	Asp	Ala
1				5					10					15	

Gly	Met	Ala	Gly	Glu	Leu	Thr	Pro	Glu	Glu	Glu	Ala	Gln	Tyr	Lys	Lys
			20					25					30		

Ala	Phe	Ser	Ala	Val	Asp	Thr	Asp	Gly	Asn	Gly	Thr	Ile	Asn	Ala	Gln
		35					40					45			

Glu	Leu	Gly	Ala	Ala	Leu	Lys	Ala	Thr	Gly	Lys	Asn	Leu	Ser	Glu	Ala
	50					55					60				

Gln	Leu	Arg	Lys	Leu	Ile	Ser	Glu	Val	Asp	Xaa	Asp	Gly	Asp	Gly	Glu
65					70					75					80

Ile	Ser	Phe	Gln	Glu	Phe	Leu	Thr	Ala	Ala	Xaa	Lys	Ala	Arg	Ala	Gly
					85				90					95	

625

Leu Glu Asp Leu Xaa Val Ala Phe Arg Ala Phe Asp Gln Asp Gly Asp
 100 105 110

Gly His Ile Thr Val Asp Glu Leu Arg Arg Ala Xaa Ala Gly Leu Gly
 115 120 125

Xaa Leu Xaa Glu Ile Asp His Phe Gly
 130 135

<210> 659

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (28)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 659

Pro Xaa Ser Arg Gln Asp Val Met Asp Ile Val Phe Ile Glu Gln Leu
 1 5 10 15

Ser Val Ile Thr Thr Ile Gly Val Tyr Asp Trp Xaa Gln Xaa Ser Asn
 20 25 30

Arg Ser

<210> 660

<211> 56

<212> PRT

<213> Homo sapiens

<400> 660

Asn Pro Ile Ser Pro Lys Asn Tyr Lys Lys Ile Ser Gln Ala Gln Ser
 1 5 10 15

626

Gln Leu Pro Val Ile Pro Ala Thr Gln Glu Ala Glu Ser Gly Glu Ser
 20 25 30

Leu Gly Pro Gly Ala Ala Glu Val Asn Ser Glu Pro Arg Leu His His
 35 40 45

Arg Thr Pro Ala Trp Ile Thr Lys
 50 55

<210> 661
 <211> 41
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (29)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (31)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (36)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (39)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 661
 Tyr Ile Gly Phe Val Ile Leu Val Phe Phe Ala Ser Ser Tyr Val Lys
 1 5 10 15

Glu Ile Asp Asn Lys Ile Leu Asn Asn Lys Lys Lys Xaa Lys Xaa Ser
 20 25 30

Ser Lys Gly Xaa Val Ala Xaa Ala Ile
 35 40

<210> 662
 <211> 524

627

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (124)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (191)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 662

Cys	Glu	Ala	Trp	Arg	Gly	Arg	Ala	Asp	Pro	Gly	Gly	Gln	Ser	Cys	Leu
1				5					10					15	

Gln	Ala	Leu	Gln	Asn	Ser	Thr	Ala	Pro	Gln	His	Pro	Gly	Leu	His	Arg
			20					25					30		

Trp	Thr	Gly	Asp	Arg	Lys	Met	Pro	Pro	Arg	Arg	Asp	Arg	Gly	Cys	Asp
		35					40					45			

Pro	Val	Gly	Asn	Ile	Pro	Gln	Gly	Glu	Ser	Gly	Gly	Trp	Trp	Pro	Glu
	50					55					60				

Gly	Ala	Gly	Asp	Leu	Leu	Gly	Ala	Thr	Pro	Asp	Arg	Glu	Ser	Pro	Gln
65					70					75					80

Leu	Pro	Gly	Gln	Arg	Leu	Gln	Pro	His	Pro	Gln	Gln	Cys	Leu	His	Gly
				85					90					95	

Arg	Arg	Val	Arg	Gly	Pro	Ser	Trp	Arg	Val	Glu	Ala	Trp	Gly	Pro	Gly
			100					105					110		

Leu	His	Val	Phe	Gly	Pro	Gly	Gln	Arg	Trp	Gly	Xaa	Ser	Pro	Gln	Gly
		115					120					125			

Ile	Pro	Glu	Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser
	130					135					140				

Gly	Arg	Val	Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly
145					150					155					160

Cys	Leu	Ile	Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala
				165					170					175	

Leu	Arg	Asn	Pro	Gly	Lys	Ile	Pro	Lys	Thr	Leu	Val	Pro	His	Xaa	Cys
		180						185					190		

Lys	Leu	Val	Gly	Ala	Asn	Pro	Lys	Val	Arg	Pro	Asn	Pro	Ala	Arg	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

628

195	200	205
Leu Gln Asn Cys Arg Ala Pro Gly Gly Phe Met Ser Asn Arg Phe Val		
210	215	220
Glu Thr Asn Leu Phe Leu Glu Glu Ile Gln Ile Lys Glu Pro Ala Glu		
225	230	235 240
Lys Gln Lys Phe Phe Gln Glu Leu Ser Lys Ser Leu Asp Ala Phe Pro		
	245	250 255
Glu Asp Phe Cys Arg His Lys Val Leu Pro Gln Leu Leu Thr Ala Phe		
	260	265 270
Glu Phe Gly Asn Ala Gly Ala Val Val Leu Thr Pro Leu Phe Lys Val		
	275	280 285
Gly Lys Phe Leu Ser Ala Glu Glu Tyr Gln Gln Lys Ile Ile Pro Val		
	290	295 300
Val Val Lys Met Phe Ser Ser Thr Asp Arg Ala Met Arg Ile Arg Leu		
305	310	315 320
Leu Gln Gln Met Glu Gln Phe Ile Gln Tyr Leu Asp Glu Pro Thr Val		
	325	330 335
Asn Thr Gln Ile Phe Pro His Val Val His Gly Phe Leu Asp Thr Asn		
	340	345 350
Pro Ala Ile Arg Glu Gln Thr Val Lys Ser Met Leu Leu Leu Ala Pro		
	355	360 365
Lys Leu Asn Glu Ala Asn Leu Asn Val Glu Leu Met Lys His Phe Ala		
	370	375 380
Arg Leu Gln Ala Lys Asp Glu Gln Gly Pro Ile Arg Cys Asn Thr Thr		
385	390	395 400
Val Cys Leu Gly Lys Ile Gly Ser Tyr Leu Ser Ala Ser Thr Arg His		
	405	410 415
Arg Val Leu Thr Ser Ala Phe Ser Arg Ala Thr Arg Asp Pro Phe Ala		
	420	425 430
Pro Ser Arg Val Ala Gly Val Leu Gly Phe Ala Ala Thr His Asn Leu		
	435	440 445
Tyr Ser Met Asn Asp Cys Ala Gln Lys Ile Leu Pro Val Leu Cys Gly		
450	455	460
Leu Thr Val Asp Pro Glu Lys Ser Val Arg Asp Gln Ala Phe Lys Ala		

629

465 470 475 480
 Phe Gly Ala Ser Cys Pro Asn Trp Ser Leu Cys Arg Arg Thr Arg Pro
 485 490 495
 Ser Trp Arg Lys Trp Arg Arg Met Ser Met Gln Pro Pro Ala Leu Ala
 500 505 510
 Trp Glu Glu Pro Gln Leu Ala Gly Gln Ala Gly Pro
 515 520

<210> 663

<211> 272

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 663

Pro Thr Leu Asp Ser Ala Arg Ser Leu Ser Met Arg Ala Pro Ser Leu
 1 5 10 15
 Thr Pro Ser Ala Ala Pro Leu Ser Thr Trp Pro Leu Xaa Ile Leu Val
 20 25 30
 Arg Ser Gly His Asn Arg Ala Val Asp Trp Trp Ser Leu Gly Ala Leu
 35 40 45
 Met Tyr Asp Met Leu Thr Gly Ser Pro Pro Phe Thr Ala Glu Asn Arg
 50 55 60
 Lys Lys Thr Met Asp Lys Ile Ile Arg Gly Lys Leu Ala Leu Pro Pro
 65 70 75 80
 Tyr Leu Thr Pro Asp Ala Arg Asp Leu Val Lys Lys Phe Leu Lys Arg
 85 90 95
 Asn Pro Ser Gln Arg Ile Gly Gly Gly Pro Gly Asp Ala Ala Asp Val
 100 105 110
 Gln Arg His Pro Phe Phe Arg His Met Asn Trp Asp Asp Leu Leu Ala
 115 120 125
 Trp Arg Val Asp Pro Pro Phe Arg Pro Cys Leu Gln Ser Glu Glu Asp
 130 135 140

630

Val Ser Gln Phe Asp Thr Arg Phe Thr Arg Gln Thr Pro Val Asp Ser
 145 150 155 160
 Pro Asp Asp Thr Ala Leu Ser Glu Ser Ala Asn Gln Ala Phe Leu Gly
 165 170 175
 Phe Thr Tyr Val Ala Pro Ser Val Leu Asp Ser Ile Lys Glu Gly Phe
 180 185 190
 Ser Phe Gln Pro Lys Leu Arg Ser Pro Arg Arg Leu Asn Ser Ser Pro
 195 200 205
 Arg Ala Pro Val Ser Pro Leu Lys Phe Ser Pro Phe Glu Gly Phe Arg
 210 215 220
 Pro Ser Pro Ser Leu Pro Glu Pro Thr Glu Leu Pro Leu Pro Pro Leu
 225 230 235 240
 Leu Pro Pro Pro Pro Pro Ser Thr Thr Ala Pro Leu Pro Ile Arg Pro
 245 250 255
 Pro Ser Gly Thr Lys Lys Ser Lys Arg Gly Arg Gly Arg Pro Gly Arg
 260 265 270

<210> 664

<211> 256

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (99)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 664

Gly Thr Arg Arg Glu Thr Trp Arg Pro Gly Ser Met Ala Gly Leu Glu
 1 5 10 15
 Leu Leu Ser Asp Gln Gly Tyr Arg Val Asp Gly Arg Arg Ala Gly Glu
 20 25 30
 Leu Arg Lys Ile Gln Ala Arg Met Gly Val Phe Ala Gln Ala Asp Gly
 35 40 45
 Ser Ala Tyr Ile Glu Gln Gly Asn Thr Lys Ala Leu Ala Val Val Tyr
 50 55 60

631

Gly Pro His Glu Ile Arg Gly Ser Arg Ala Arg Ala Leu Pro Asp Arg
 65 70 75 80
 Ala Leu Val Asn Cys Gln Tyr Ser Ser Ala Thr Phe Ser Thr Gly Glu
 85 90 95
 Arg Lys Xaa Arg Pro His Gly Asp Arg Lys Ser Cys Glu Met Gly Leu
 100 105 110
 Gln Leu Arg Gln Thr Phe Glu Ala Ala Ile Leu Thr Gln Leu His Pro
 115 120 125
 Arg Ser Gln Ile Asp Ile Tyr Val Gln Val Leu Gln Ala Asp Gly Gly
 130 135 140
 Thr Tyr Ala Ala Cys Val Asn Ala Ala Thr Leu Ala Val Leu Asp Ala
 145 150 155 160
 Gly Ile Pro Met Arg Asp Phe Val Cys Ala Cys Ser Ala Gly Phe Val
 165 170 175
 Asp Gly Thr Ala Leu Ala Asp Leu Ser His Val Glu Glu Ala Ala Gly
 180 185 190
 Gly Pro Gln Leu Ala Leu Ala Leu Leu Pro Ala Ser Gly Gln Ile Ala
 195 200 205
 Leu Leu Glu Met Asp Ala Arg Leu His Glu Asp His Leu Glu Arg Val
 210 215 220
 Leu Glu Ala Ala Ala Gln Ala Ala Arg Asp Val His Thr Leu Leu Asp
 225 230 235 240
 Arg Val Val Arg Gln His Val Arg Glu Ala Ser Ile Leu Leu Gly Asp
 245 250 255

<210> 665

<211> 241

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

632

<220>

<221> SITE

<222> (122)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 665

Pro	Arg	Gly	Asp	Lys	Ala	Arg	Thr	Xaa	Pro	Pro	Ala	Ala	Ser	Ala	Arg
1				5					10					15	

Pro	Ser	Arg	Ser	Lys	Arg	Gly	Gly	Glu	Glu	Arg	Val	Leu	Glu	Lys	Glu
			20					25					30		

Glu	Glu	Glu	Asp	Asp	Asp	Glu	Asp	Glu	Asp	Glu	Glu	Asp	Asp	Val	Ser
		35					40					45			

Glu	Gly	Ser	Glu	Val	Pro	Glu	Ser	Asp	Arg	Pro	Ala	Gly	Ala	Gln	His
	50					55					60				

His	Gln	Leu	Asn	Gly	Glu	Arg	Gly	Pro	Gln	Ser	Ala	Lys	Glu	Arg	Val
65					70				75					80	

Lys	Glu	Trp	Thr	Pro	Cys	Gly	Pro	His	Gln	Gly	Gln	Asp	Glu	Gly	Arg
				85					90					95	

Gly	Pro	Ala	Pro	Gly	Ser	Gly	Thr	Arg	Gln	Val	Phe	Ser	Met	Ala	Ala
		100						105					110		

Met	Asn	Lys	Glu	Gly	Gly	Thr	Ala	Ser	Xaa	Ala	Thr	Gly	Pro	Asp	Ser
	115						120					125			

Pro	Ser	Pro	Val	Pro	Leu	Pro	Pro	Gly	Lys	Pro	Ala	Leu	Pro	Gly	Ala
	130					135					140				

Asp	Gly	Thr	Pro	Phe	Gly	Cys	Pro	Pro	Gly	Arg	Lys	Glu	Lys	Pro	Ser
145					150					155				160	

Asp	Pro	Val	Glu	Trp	Thr	Val	Met	Asp	Val	Val	Glu	Tyr	Phe	Thr	Glu
			165						170					175	

Ala	Gly	Phe	Pro	Glu	Gln	Ala	Thr	Val	Phe	Gln	Glu	Gln	Glu	Ile	Asp
		180						185					190		

Gly	Lys	Ser	Leu	Leu	Leu	Met	Gln	Arg	Thr	Asp	Val	Leu	Thr	Gly	Leu
	195						200					205			

Ser	Ile	Arg	Leu	Gly	Pro	Ala	Leu	Lys	Ile	Tyr	Glu	His	His	Ile	Lys
	210					215					220				

Val	Leu	Gln	Gln	Gly	His	Phe	Glu	Asp	Asp	Asp	Pro	Asp	Gly	Phe	Leu
225					230					235					240

633

Gly

<210> 666

<211> 131

<212> PRT

<213> Homo sapiens

<400> 666

Val	Thr	Gly	Gly	Gly	Ala	Val	Val	Leu	Gly	Ala	Glu	Ser	His	Ala	Ser
1				5					10					15	

Lys	Asp	Val	Ala	Ile	Asp	Met	Met	Asp	Ser	Arg	Thr	Ser	Gln	Gln	Leu
		20						25					30		

Gln	Leu	Ile	Asp	Glu	Gln	Asp	Ser	Tyr	Ile	Gln	Ser	Arg	Ala	Asp	Thr
	35					40					45				

Met	Gln	Asn	Ile	Glu	Ser	Thr	Ile	Val	Glu	Leu	Gly	Ser	Ile	Phe	Gln
	50					55					60				

Gln	Leu	Ala	His	Met	Val	Lys	Glu	Gln	Glu	Glu	Thr	Ile	Gln	Arg	Ile
65				70					75						80

Asp	Glu	Asn	Val	Leu	Gly	Ala	Gln	Leu	Asp	Val	Glu	Ala	Ala	His	Ser
			85						90					95	

Glu	Ile	Leu	Lys	Tyr	Phe	Gln	Ser	Val	Thr	Ser	Asn	Arg	Trp	Leu	Met
		100						105					110		

Val	Lys	Ile	Phe	Leu	Ile	Leu	Ile	Val	Phe	Phe	Ile	Ile	Phe	Val	Val
	115					120						125			

Phe	Leu	Ala
	130	

<210> 667

<211> 652

<212> PRT

<213> Homo sapiens

<400> 667

Leu	Ser	Trp	Asn	Arg	Tyr	Thr	Ser	Val	Ser	Pro	Leu	His	Arg	Ser	Leu
1			5						10					15	

Gln	Leu	Pro	Pro	Arg	Val	Ser	Gly	Val	Arg	Cys	Asp	Gln	Cys	Ala	Arg
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

634

					20						25						30
Gly	Phe	Ser	Gly	Ile	Phe	Pro	Ala	Cys	His	Pro	Cys	His	Ala	Cys	Phe		
					35						40						45
Gly	Asp	Trp	Asp	Arg	Val	Val	Gln	Asp	Leu	Ala	Ala	Arg	Thr	Gln	Arg		
					50						55						60
Leu	Glu	Gln	Arg	Ala	Gln	Glu	Leu	Gln	Gln	Thr	Gly	Val	Leu	Gly	Ala		
					65						70						75
Phe	Glu	Ser	Ser	Phe	Trp	His	Met	Gln	Glu	Lys	Leu	Gly	Ile	Val	Gln		
					85						90						95
Gly	Ile	Val	Gly	Ala	Arg	Asn	Thr	Ser	Ala	Ala	Ser	Thr	Ala	Gln	Leu		
					100						105						110
Val	Glu	Ala	Thr	Glu	Glu	Leu	Arg	Arg	Glu	Ile	Gly	Glu	Ala	Thr	Glu		
					115						120						125
His	Leu	Thr	Gln	Leu	Glu	Ala	Asp	Leu	Thr	Asp	Val	Gln	Asp	Glu	Asn		
					130						135						140
Phe	Asn	Ala	Asn	His	Ala	Leu	Ser	Gly	Leu	Glu	Arg	Asp	Arg	Leu	Ala		
					145						150						155
Leu	Asn	Leu	Thr	Leu	Arg	Gln	Leu	Asp	Gln	His	Leu	Asp	Leu	Leu	Lys		
					165						170						175
His	Ser	Asn	Phe	Leu	Gly	Ala	Tyr	Asp	Ser	Ile	Arg	His	Ala	His	Ser		
					180						185						190
Gln	Ser	Ala	Glu	Ala	Glu	Arg	Arg	Ala	Asn	Thr	Ser	Ala	Leu	Ala	Val		
					195						200						205
Pro	Ser	Pro	Val	Ser	Asn	Ser	Ala	Ser	Ala	Arg	His	Arg	Thr	Glu	Ala		
					210						215						220
Leu	Met	Asp	Ala	Gln	Lys	Glu	Asp	Phe	Asn	Ser	Lys	His	Met	Ala	Asn		
					225						230						235
Gln	Arg	Ala	Leu	Gly	Lys	Leu	Ser	Ala	His	Thr	His	Thr	Leu	Ser	Leu		
					245						250						255
Thr	Asp	Ile	Asn	Glu	Leu	Val	Cys	Gly	Ala	Pro	Gly	Asp	Ala	Pro	Cys		
					260						265						270
Ala	Thr	Ser	Pro	Cys	Gly	Gly	Ala	Gly	Cys	Arg	Asp	Glu	Asp	Gly	Gln		
					275						280						285
Pro	Arg	Cys	Gly	Gly	Leu	Ser	Cys	Asn	Gly	Ala	Ala	Ala	Thr	Ala	Asp		

635

290	295	300
Leu Ala Leu Gly Arg Ala Arg His Thr Gln Ala Glu Leu Gln Arg Ala		
305	310	315 320
Leu Ala Glu Gly Gly Ser Ile Leu Ser Arg Val Ala Glu Thr Arg Arg		
	325	330 335
Gln Ala Ser Glu Ala Gln Gln Arg Ala Gln Ala Ala Leu Asp Lys Ala		
	340	345 350
Asn Ala Ser Arg Gly Gln Val Glu Gln Ala Asn Gln Glu Leu Gln Glu		
	355	360 365
Leu Ile Gln Ser Val Lys Asp Phe Leu Asn Gln Glu Gly Ala Asp Pro		
	370	375 380
Asp Ser Ile Glu Met Val Ala Thr Arg Val Leu Glu Leu Ser Ile Pro		
	385	390 395 400
Ala Ser Ala Glu Gln Ile Gln His Leu Ala Gly Ala Ile Ala Glu Arg		
	405	410 415
Val Arg Ser Leu Ala Asp Val Asp Ala Ile Leu Ala Arg Thr Val Gly		
	420	425 430
Asp Val Arg Arg Ala Glu Gln Leu Leu Gln Asp Ala Arg Arg Ala Arg		
	435	440 445
Ser Trp Ala Glu Asp Glu Lys Gln Lys Ala Glu Thr Val Gln Ala Ala		
	450	455 460
Leu Glu Glu Ala Gln Arg Ala Gln Gly Ile Ala Gln Gly Ala Ile Arg		
	465	470 475 480
Gly Ala Val Ala Asp Thr Arg Asp Thr Glu Gln Thr Leu Tyr Gln Val		
	485	490 495
Gln Glu Arg Met Ala Gly Ala Glu Arg Ala Leu Ser Ser Ala Gly Glu		
	500	505 510
Arg Ala Arg Gln Leu Asp Ala Leu Leu Glu Ala Leu Lys Leu Lys Arg		
	515	520 525
Ala Gly Asn Ser Leu Ala Ala Ser Thr Ala Glu Glu Thr Ala Gly Ser		
	530	535 540
Ala Gln Gly Arg Ala Gln Glu Ala Glu Gln Leu Leu Arg Gly Pro Leu		
	545	550 555 560
Gly Asp Gln Tyr Gln Thr Val Lys Ala Leu Ala Glu Arg Lys Ala Gln		

636

	565		570		575
Gly Val Leu Ala Ala Gln Ala Arg Ala Glu Gln Leu Arg Asp Glu Ala					
	580		585		590
Arg Asp Leu Leu Gln Ala Ala Gln Asp Lys Leu Gln Arg Leu Gln Glu					
	595		600		605
Leu Glu Gly Thr Tyr Glu Glu Asn Glu Arg Ala Leu Glu Ser Lys Ala					
	610		615		620
Ala Gln Leu Asp Gly Leu Glu Ala Arg Met Arg Ser Val Leu Gln Ala					
	625		630		635
					640
Ile Asn Leu Gln Val Gln Ile Tyr Asn Thr Cys Gln					
	645		650		

<210> 668

<211> 406

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 668

Gly Ala Val Arg Ser Ser Cys Ala Glu Leu Gln Ala Arg Val Met Ala
1 5 10 15

Ala Leu Arg Gln Pro Gln Val Ala Glu Cys Trp Pro Arg Pro Gly Glu
20 25 30

Pro Ser Gly Arg Ser Ser Gly Pro Ser Pro Ser Trp Pro Cys Gln Arg
35 40 45

Arg Ala Ala Cys Asn Leu Ile Gly Glu His Thr Asp Tyr Asn Gln Gly
50 55 60

Leu Val Leu Pro Met Ala Leu Glu Leu Met Thr Val Leu Val Gly Ser
65 70 75 80

Pro Arg Lys Xaa Gly Leu Val Ser Leu Leu Thr Thr Ser Glu Gly Ala
85 90 95

Asp Glu Pro Gln Arg Leu Gln Phe Pro Leu Pro Thr Ala Gln Arg Ser
100 105 110

637

Leu	Glu	Pro	Gly	Thr	Pro	Arg	Trp	Ala	Asn	Tyr	Val	Lys	Gly	Val	Ile	115	120	125	
Gln	Tyr	Tyr	Pro	Ala	Ala	Pro	Leu	Pro	Gly	Phe	Ser	Ala	Val	Val	Val	130	135	140	
Ser	Ser	Val	Pro	Leu	Gly	Gly	Gly	Leu	Ser	Ser	Ser	Ala	Ser	Leu	Glu	145	150	155	160
Val	Ala	Thr	Tyr	Thr	Phe	Leu	Gln	Gln	Leu	Cys	Pro	Asp	Ser	Gly	Thr	165	170	175	
Ile	Ala	Ala	Arg	Ala	Gln	Val	Cys	Gln	Gln	Ala	Glu	His	Ser	Phe	Ala	180	185	190	
Gly	Met	Pro	Cys	Gly	Ile	Met	Asp	Gln	Phe	Ile	Ser	Leu	Met	Gly	Gln	195	200	205	
Lys	Gly	His	Ala	Leu	Leu	Ile	Asp	Cys	Arg	Ser	Leu	Glu	Thr	Ser	Leu	210	215	220	
Val	Pro	Leu	Ser	Asp	Pro	Lys	Leu	Ala	Val	Leu	Ile	Thr	Asn	Ser	Asn	225	230	235	240
Val	Arg	His	Ser	Leu	Ala	Ser	Ser	Glu	Tyr	Pro	Val	Arg	Arg	Arg	Gln	245	250	255	
Cys	Glu	Glu	Val	Ala	Arg	Ala	Leu	Gly	Lys	Glu	Ser	Leu	Arg	Glu	Val	260	265	270	
Gln	Leu	Glu	Glu	Leu	Glu	Ala	Ala	Arg	Asp	Leu	Val	Ser	Lys	Glu	Gly	275	280	285	
Phe	Arg	Arg	Ala	Arg	His	Val	Val	Gly	Glu	Ile	Arg	Arg	Thr	Ala	Gln	290	295	300	
Ala	Ala	Ala	Ala	Leu	Arg	Arg	Gly	Asp	Tyr	Arg	Ala	Phe	Gly	Arg	Leu	305	310	315	320
Met	Val	Glu	Ser	His	Arg	Ser	Leu	Arg	Asp	Asp	Tyr	Glu	Val	Ser	Cys	325	330	335	
Pro	Glu	Leu	Asp	Gln	Leu	Val	Glu	Ala	Ala	Leu	Ala	Val	Pro	Gly	Val	340	345	350	
Tyr	Gly	Ser	Arg	Met	Thr	Gly	Gly	Gly	Phe	Gly	Gly	Cys	Thr	Val	Thr	355	360	365	
Leu	Leu	Glu	Ala	Ser	Ala	Ala	Pro	His	Ala	Met	Arg	His	Ile	Gln	Glu	370	375	380	

638

His Tyr Gly Gly Thr Ala Thr Phe Tyr Leu Ser Gln Ala Ala Asp Gly
 385 390 395 400

Ala Lys Val Leu Cys Leu
 405

<210> 669

<211> 86

<212> PRT

<213> Homo sapiens

<400> 669

Pro Glu Pro Thr Val Val Met Ala Ala Arg Ala Leu Cys Met Leu Gly
 1 5 10 15

Leu Val Leu Ala Leu Leu Ser Ser Ser Ser Ala Glu Glu Tyr Val Gly
 20 25 30

Leu Ser Ala Asn Gln Cys Ala Val Pro Ala Lys Asp Arg Val Asp Cys
 35 40 45

Gly Tyr Pro His Val Thr Pro Lys Glu Cys Asn Asn Arg Gly Cys Cys
 50 55 60

Phe Asp Ser Arg Ile Pro Gly Val Pro Trp Cys Phe Lys Pro Leu Gln
 65 70 75 80

Glu Ala Glu Cys Thr Phe
 85

<210> 670

<211> 392

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 670

Gly Gly Gly Ala Arg Xaa Ser Pro Ala Thr Gln Pro Pro Pro Leu Leu
 1 5 10 15

Pro Pro Ser Ala Thr Gly Pro Asp Ala Thr Val Gly Gly Pro Ala Pro
 20 25 30

639

Thr Pro Leu Leu Pro Pro Ser Ala Thr Ala Ser Val Lys Met Glu Pro
 35 40 45
 Glu Asn Lys Tyr Leu Pro Glu Leu Met Ala Glu Lys Asp Ser Leu Asp
 50 55 60
 Pro Ser Phe Thr His Ala Met Gln Leu Leu Thr Ala Glu Ile Glu Lys
 65 70 75 80
 Ile Gln Lys Gly Asp Ser Lys Lys Asp Asp Glu Glu Asn Tyr Leu Asp
 85 90 95
 Leu Phe Ser His Lys Asn Met Lys Leu Lys Glu Arg Val Leu Ile Pro
 100 105 110
 Val Lys Gln Tyr Pro Lys Phe Asn Phe Val Gly Lys Ile Leu Gly Pro
 115 120 125
 Gln Gly Asn Thr Ile Lys Arg Leu Gln Glu Glu Thr Gly Ala Lys Ile
 130 135 140
 Ser Val Leu Gly Lys Gly Ser Met Arg Asp Lys Ala Lys Glu Glu Glu
 145 150 155 160
 Leu Arg Lys Gly Gly Asp Pro Lys Tyr Ala His Leu Asn Met Asp Leu
 165 170 175
 His Val Phe Ile Glu Val Phe Gly Pro Pro Cys Glu Ala Tyr Ala Leu
 180 185 190
 Met Ala His Ala Met Glu Glu Val Lys Lys Phe Leu Val Pro Asp Met
 195 200 205
 Met Asp Asp Ile Cys Gln Glu Gln Phe Leu Glu Leu Ser Tyr Leu Asn
 210 215 220
 Gly Val Pro Glu Pro Ser Arg Gly Arg Gly Val Pro Val Arg Gly Arg
 225 230 235 240
 Gly Ala Ala Pro Pro Pro Pro Pro Val Pro Arg Gly Arg Gly Val Gly
 245 250 255
 Pro Pro Arg Gly Ala Leu Val Arg Gly Thr Pro Val Arg Gly Ala Ile
 260 265 270
 Thr Arg Gly Ala Thr Val Thr Arg Gly Val Pro Pro Pro Pro Thr Val
 275 280 285
 Arg Gly Ala Pro Ala Pro Arg Ala Arg Thr Ala Gly Ile Gln Arg Ile
 290 295 300

640

Pro Leu Pro Pro Pro Pro Ala Pro Glu Thr Tyr Glu Glu Tyr Gly Tyr
 305 310 315 320

Asp Asp Thr Tyr Ala Glu Gln Ser Tyr Glu Gly Tyr Glu Gly Tyr Tyr
 325 330 335

Ser Gln Ser Gln Gly Asp Ser Glu Tyr Tyr Asp Tyr Gly His Gly Glu
 340 345 350

Val Gln Asp Ser Tyr Glu Ala Tyr Gly Gln Asp Asp Trp Asn Gly Thr
 355 360 365

Arg Pro Ser Leu Lys Ala Pro Pro Ala Arg Pro Val Lys Gly Ala Tyr
 370 375 380

Arg Glu His Pro Tyr Gly Arg Tyr
 385 390

<210> 671
 <211> 180
 <212> PRT
 <213> Homo sapiens

<400> 671
 Arg Asn Met Ser Ser Phe Ser Arg Ala Pro Gln Gln Trp Ala Thr Phe
 1 5 10 15

Ala Arg Ile Trp Tyr Leu Leu Asp Gly Lys Met Gln Pro Pro Gly Lys
 20 25 30

Leu Ala Ala Met Ala Ser Ile Arg Leu Gln Gly Leu His Lys Pro Val
 35 40 45

Tyr His Ala Leu Ser Asp Cys Gly Asp His Val Val Ile Met Asn Thr
 50 55 60

Arg His Ile Ala Phe Ser Gly Asn Lys Trp Glu Gln Lys Val Tyr Ser
 65 70 75 80

Ser His Thr Gly Tyr Pro Gly Gly Phe Arg Gln Val Thr Ala Ala Gln
 85 90 95

Leu His Leu Arg Asp Pro Val Ala Ile Val Lys Leu Ala Ile Tyr Gly
 100 105 110

Met Leu Pro Lys Asn Leu His Arg Arg Thr Met Met Glu Arg Leu His
 115 120 125

Leu Phe Pro Asp Glu Tyr Ile Pro Glu Asp Ile Leu Lys Asn Leu Val

641

130 135 140
 Glu Glu Leu Pro Gln Pro Arg Lys Ile Pro Lys Arg Leu Asp Glu Tyr
 145 150 155 160
 Thr Gln Glu Glu Ile Asp Ala Phe Pro Arg Leu Trp Thr Pro Pro Glu
 165 170 175
 Asp Tyr Arg Leu
 180

<210> 672
 <211> 78
 <212> PRT
 <213> Homo sapiens

<400> 672
 Glu Asn Tyr Gln Phe Thr Tyr Arg Arg Phe Phe Phe Pro Asn Ser Arg
 1 5 10 15
 Phe His Pro Arg Pro Phe Glu Glu Leu Gln Thr Leu Ser Leu Arg Lys
 20 25 30
 Glu Arg Gly Gln Pro Lys Ile Asn Ala Lys Phe Ala Tyr Thr Pro Ser
 35 40 45
 His Ser Asp Val Leu Val Val Thr Tyr Tyr Gln Cys Gly Arg Glu Pro
 50 55 60
 Lys Leu His Phe Arg Ser Lys Tyr Ser Leu Cys Arg Tyr Cys
 65 70 75

<210> 673
 <211> 139
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (113)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (132)
 <223> Xaa equals any of the naturally occurring L-amino acids

642

<400> 673

Pro Thr Arg Pro Pro Leu Cys Arg Gly Ala Ala Ser Arg Gly Leu Leu
1 5 10 15
Cys Lys Trp Ala Pro Trp Pro Ser Ala Pro Val Pro Ala Thr Arg Asp
20 25 30
Arg Ala Pro Arg Pro Ala Arg Gly Arg Arg Pro Gly Arg Leu Gly Ser
35 40 45
Thr Ser Ser Asn Ser Ser Cys Ser Ser Thr Glu Cys Pro Gly Glu Ala
50 55 60
Ile Pro His Pro Pro Gly Leu Pro Lys Ala Asp Pro Gly His Trp Trp
65 70 75 80
Ala Ser Phe Phe Phe Gly Lys Ser Thr Leu Pro Phe Met Ala Thr Val
85 90 95
Leu Glu Ser Ala Glu His Ser Glu Pro Pro Gln Ala Ser Ser Ser Met
100 105 110
Xaa Ala Cys Gly Leu Ala Arg Glu Ala Pro Arg Lys Gln Pro Gly Gly
115 120 125
Gln Ser Ser Xaa Ala Ser Ala Gly Pro Pro Ser
130 135

<210> 674

<211> 279

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (58)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (193)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 674

643

Glu	Arg	Ala	His	Ser	Leu	Xaa	His	Gly	Val	Asp	Gly	Glu	Pro	Cys	Pro	1	5	10	15
Glu	Asp	Tyr	Lys	Tyr	Ile	Ser	Glu	Asn	Cys	Glu	Thr	Ser	Thr	Met	Asn	20	25	30	
Ile	Asp	Arg	Asn	Ile	Thr	His	Leu	Gln	His	Cys	Thr	Phe	Val	Asp	Asp	35	40	45	
Cys	Ser	Ser	Ser	Asn	Cys	Leu	Cys	Gly	Xaa	Phe	Ser	Ile	Arg	Cys	Trp	50	55	60	
Tyr	Asp	Lys	Asp	Gly	Arg	Leu	Leu	Gln	Glu	Phe	Asn	Lys	Ile	Glu	Pro	65	70	75	80
Pro	Leu	Ile	Phe	Glu	Cys	Asn	Gln	Ala	Cys	Ser	Cys	Trp	Arg	Asn	Cys	85	90	95	
Lys	Asn	Arg	Val	Val	Gln	Ser	Gly	Ile	Lys	Val	Arg	Leu	Gln	Leu	Tyr	100	105	110	
Arg	Thr	Ala	Lys	Met	Gly	Trp	Gly	Val	Arg	Ala	Leu	Gln	Thr	Ile	Pro	115	120	125	
Gln	Gly	Thr	Phe	Ile	Cys	Glu	Tyr	Val	Gly	Glu	Leu	Ile	Ser	Asp	Ala	130	135	140	
Glu	Ala	Asp	Val	Arg	Glu	Asp	Asp	Ser	Tyr	Leu	Phe	Asp	Leu	Asp	Asn	145	150	155	160
Lys	Asp	Gly	Glu	Val	Tyr	Cys	Ile	Asp	Ala	Arg	Tyr	Tyr	Gly	Asn	Ile	165	170	175	
Ser	Arg	Phe	Ile	Asn	His	Leu	Cys	Asp	Pro	Asn	Ile	Ile	Pro	Val	Arg	180	185	190	
Xaa	Phe	Met	Leu	His	Gln	Asp	Leu	Arg	Phe	Pro	Arg	Ile	Ala	Phe	Phe	195	200	205	
Ser	Ser	Arg	Asp	Ile	Arg	Thr	Gly	Glu	Glu	Leu	Gly	Phe	Asp	Tyr	Gly	210	215	220	
Asp	Arg	Phe	Trp	Asp	Ile	Lys	Ser	Lys	Tyr	Phe	Thr	Cys	Gln	Cys	Gly	225	230	235	240
Ser	Glu	Lys	Cys	Lys	His	Ser	Ala	Glu	Ala	Ile	Ala	Leu	Glu	Gln	Ser	245	250	255	
Arg	Leu	Ala	Arg	Leu	Asp	Pro	His	Pro	Glu	Leu	Leu	Pro	Glu	Leu	Gly	260	265	270	

644

Ser Leu Pro Pro Val Asn Thr
275

<210> 675
<211> 405
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (393)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (394)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 675
Arg Asn Thr Leu Gly Arg Gly Thr Thr Ile Thr Leu Val Leu Lys Glu
1 5 10 15
Glu Ala Ser Asp Tyr Leu Glu Leu Asp Thr Ile Lys Asn Leu Val Lys
20 25 30
Lys Tyr Ser Gln Phe Ile Asn Phe Pro Ile Tyr Val Trp Ser Ser Lys
35 40 45
Thr Glu Thr Val Glu Glu Pro Met Glu Glu Glu Glu Ala Ala Lys Glu
50 55 60
Glu Lys Glu Glu Ser Asp Asp Glu Ala Ala Val Glu Glu Glu Glu Glu
65 70 75 80
Glu Lys Lys Pro Lys Thr Lys Lys Val Glu Lys Thr Val Trp Asp Trp
85 90 95
Glu Leu Met Asn Asp Ile Lys Pro Ile Trp Gln Arg Pro Ser Lys Glu
100 105 110
Val Glu Glu Asp Glu Tyr Lys Ala Phe Tyr Lys Ser Phe Ser Lys Glu
115 120 125
Ser Asp Asp Pro Met Ala Tyr Ile His Phe Thr Ala Glu Gly Glu Val
130 135 140
Thr Phe Lys Ser Ile Leu Phe Val Pro Thr Ser Ala Pro Arg Gly Leu
145 150 155 160

645

Phe Asp Glu Tyr Gly Ser Lys Lys Ser Asp Tyr Ile Lys Leu Tyr Val
 165 170 175
 Arg Arg Val Phe Ile Thr Asp Asp Phe His Asp Met Met Pro Lys Tyr
 180 185 190
 Leu Asn Phe Val Lys Gly Val Val Asp Ser Asp Asp Leu Pro Leu Asn
 195 200 205
 Val Ser Arg Glu Thr Leu Gln Gln His Lys Leu Leu Lys Val Ile Arg
 210 215 220
 Lys Lys Leu Val Arg Lys Thr Leu Asp Met Ile Lys Lys Ile Ala Asp
 225 230 235 240
 Asp Lys Tyr Asn Asp Thr Phe Trp Lys Glu Phe Gly Thr Asn Ile Lys
 245 250 255
 Leu Gly Val Ile Glu Asp His Ser Asn Arg Thr Arg Leu Ala Lys Leu
 260 265 270
 Leu Arg Phe Gln Ser Ser His His Pro Thr Asp Ile Thr Ser Leu Asp
 275 280 285
 Gln Tyr Val Glu Arg Met Lys Glu Lys Gln Asp Lys Ile Tyr Phe Met
 290 295 300
 Ala Gly Ser Ser Arg Lys Glu Ala Glu Ser Ser Pro Phe Val Glu Arg
 305 310 315 320
 Leu Leu Lys Lys Gly Tyr Glu Val Ile Tyr Leu Thr Glu Pro Val Asp
 325 330 335
 Glu Tyr Cys Ile Gln Ala Leu Pro Glu Phe Asp Gly Lys Arg Phe Gln
 340 345 350
 Asn Val Ala Lys Glu Gly Val Lys Phe Asp Glu Ser Glu Lys Thr Lys
 355 360 365
 Glu Ser Arg Glu Ala Val Glu Lys Glu Phe Glu Pro Leu Leu Asn Trp
 370 375 380
 Met Lys Asp Lys Ala Leu Lys Gly Xaa Xaa Leu Trp Glu Ile Leu Pro
 385 390 395 400
 Ile Cys Gly Lys Tyr
 405

<210> 676

646

<211> 465
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (5)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (16)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 676

Asn	Asp	Ser	Leu	Xaa	Xaa	Lys	Ala	Gly	Thr	Pro	Ala	Gly	Asn	Arg	Xaa	1	5	10	15
Gly	Ile	Pro	Gly	Ser	Thr	His	Ala	Ser	Ala	Ala	Ala	Pro	Phe	Ala	Ala	20	25	30	
Ala	Leu	Ala	Arg	Asp	Pro	Asn	Pro	Ala	Ser	Pro	Leu	Pro	Glu	His	Arg	35	40	45	
Pro	Arg	Leu	His	Arg	Gly	Pro	Gly	Pro	Pro	Ala	Arg	Leu	Ala	Ala	Ala	50	55	60	
Met	Ala	Asp	Pro	Lys	Tyr	Ala	Asp	Leu	Pro	Gly	Ile	Ala	Arg	Asn	Glu	65	70	75	80
Pro	Asp	Val	Tyr	Glu	Thr	Ser	Asp	Leu	Pro	Glu	Asp	Asp	Gln	Ala	Glu	85	90	95	
Phe	Asp	Ala	Glu	Glu	Leu	Thr	Ser	Thr	Ser	Val	Glu	His	Ile	Ile	Val	100	105	110	
Asn	Pro	Asn	Ala	Ala	Tyr	Asp	Lys	Phe	Lys	Asp	Lys	Arg	Val	Gly	Thr	115	120	125	
Lys	Gly	Leu	Asp	Phe	Ser	Asp	Arg	Ile	Gly	Lys	Thr	Lys	Arg	Thr	Gly	130	135	140	
Tyr	Glu	Ser	Gly	Glu	Tyr	Glu	Met	Leu	Gly	Glu	Gly	Leu	Gly	Val	Lys	145	150	155	160
Glu	Thr	Pro	Gln	Gln	Lys	Tyr	Gln	Arg	Leu	Leu	His	Glu	Val	Gln	Glu				

647

					165						170					175
Leu	Thr	Thr	Glu	Val	Glu	Lys	Ile	Lys	Thr	Thr	Val	Lys	Glu	Ser	Ala	
			180					185					190			
Thr	Glu	Glu	Lys	Leu	Thr	Pro	Val	Leu	Leu	Ala	Lys	Gln	Leu	Ala	Ala	
		195					200					205				
Leu	Lys	Gln	Gln	Leu	Val	Ala	Ser	His	Leu	Glu	Lys	Leu	Leu	Gly	Pro	
	210					215					220					
Asp	Ala	Ala	Ile	Asn	Leu	Thr	Asp	Pro	Asp	Gly	Ala	Leu	Ala	Lys	Arg	
225					230					235					240	
Leu	Leu	Leu	Gln	Leu	Glu	Ala	Thr	Lys	Asn	Ser	Lys	Gly	Gly	Ser	Gly	
			245						250					255		
Gly	Lys	Thr	Thr	Gly	Thr	Pro	Pro	Asp	Ser	Ser	Leu	Val	Thr	Tyr	Glu	
			260					265					270			
Leu	His	Ser	Arg	Pro	Glu	Gln	Asp	Lys	Phe	Ser	Gln	Ala	Ala	Lys	Val	
		275					280					285				
Ala	Glu	Leu	Glu	Lys	Arg	Leu	Thr	Glu	Leu	Glu	Thr	Ala	Val	Arg	Cys	
	290					295					300					
Asp	Gln	Asp	Ala	Gln	Asn	Pro	Leu	Ser	Ala	Gly	Leu	Gln	Gly	Ala	Cys	
305					310					315					320	
Leu	Met	Glu	Thr	Val	Glu	Leu	Leu	Gln	Ala	Lys	Val	Ser	Ala	Leu	Asp	
				325					330					335		
Leu	Ala	Val	Leu	Asp	Gln	Val	Glu	Ala	Arg	Leu	Gln	Ser	Val	Leu	Gly	
			340					345					350			
Lys	Val	Asn	Glu	Ile	Ala	Lys	His	Lys	Ala	Ser	Val	Glu	Asp	Ala	Asp	
		355					360					365				
Thr	Gln	Ser	Lys	Val	His	Gln	Leu	Tyr	Glu	Thr	Ile	Gln	Arg	Trp	Ser	
	370					375					380					
Pro	Ile	Ala	Ser	Thr	Leu	Pro	Glu	Leu	Val	Gln	Arg	Leu	Val	Thr	Ile	
385					390					395					400	
Lys	Gln	Leu	His	Glu	Gln	Ala	Met	Gln	Phe	Gly	Gln	Leu	Leu	Thr	His	
			405						410					415		
Leu	Asp	Thr	Thr	Gln	Gln	Met	Ile	Ala	Asn	Ser	Leu	Lys	Asp	Asn	Thr	
			420					425					430			
Thr	Leu	Leu	Thr	Gln	Val	Gln	Thr	Thr	Met	Arg	Glu	Asn	Leu	Ala	Thr	

648

435 440 445
 Val Glu Gly Asn Phe Ala Ser Ile Asp Glu Arg Met Lys Lys Leu Gly
 450 455 460

Lys
 465

<210> 677
 <211> 48
 <212> PRT
 <213> Homo sapiens

<400> 677
 Ser Ser Phe Leu Asn Ser Asp Leu Gly Leu Ser Leu Ala Arg Asn Leu
 1 5 10 15
 Ala Phe Ser Phe Thr Thr Lys Glu Arg Asp Gln Lys Pro Leu Ile Phe
 20 25 30
 Asn Phe His Lys Met Leu Glu Val Tyr Ile Tyr Ile Tyr Ile Phe Leu
 35 40 45

<210> 678
 <211> 940
 <212> PRT
 <213> Homo sapiens

<400> 678
 Val Leu Gly Glu Gly Ile Ser Phe Leu Leu Ser Pro Pro Leu Pro Thr
 1 5 10 15
 Pro Ser Ile Asn Ile Ile Leu Leu Lys Ile Leu Arg Cys Gln Ala Ala
 20 25 30
 Lys Val Glu Ser Ala Ile Ala Glu Gly Gly Ala Ser Arg Phe Ser Ala
 35 40 45
 Ser Ser Gly Gly Gly Gly Ser Arg Gly Ala Pro Gln His Tyr Pro Lys
 50 55 60
 Thr Ala Gly Asn Ser Glu Phe Leu Gly Lys Thr Pro Gly Gln Asn Ala
 65 70 75 80

649

Gln	Lys	Trp	Ile	Pro	Ala	Arg	Ser	Thr	Arg	Arg	Asp	Asp	Asn	Ser	Ala	85	90	95	
Ala	Asn	Asn	Ser	Ala	Asn	Glu	Lys	Glu	Arg	His	Asp	Ala	Ile	Phe	Arg	100	105	110	
Lys	Val	Arg	Gly	Ile	Leu	Asn	Lys	Leu	Thr	Pro	Glu	Lys	Phe	Asp	Lys	115	120	125	
Leu	Cys	Leu	Glu	Leu	Leu	Asn	Val	Gly	Val	Glu	Ser	Lys	Leu	Ile	Leu	130	135	140	
Lys	Gly	Val	Ile	Leu	Leu	Ile	Val	Asp	Lys	Ala	Leu	Glu	Glu	Pro	Lys	145	150	155	160
Tyr	Ser	Ser	Leu	Tyr	Ala	Gln	Leu	Cys	Leu	Arg	Leu	Ala	Glu	Asp	Ala	165	170	175	
Pro	Asn	Phe	Asp	Gly	Pro	Ala	Ala	Glu	Gly	Gln	Pro	Gly	Gln	Lys	Gln	180	185	190	
Ser	Thr	Thr	Phe	Arg	Arg	Leu	Leu	Ile	Ser	Lys	Leu	Gln	Asp	Glu	Phe	195	200	205	
Glu	Asn	Arg	Thr	Arg	Asn	Val	Asp	Val	Tyr	Asp	Lys	Arg	Glu	Asn	Pro	210	215	220	
Leu	Leu	Pro	Glu	Glu	Glu	Glu	Gln	Arg	Ala	Ile	Ala	Lys	Ile	Lys	Met	225	230	235	240
Leu	Gly	Asn	Ile	Lys	Phe	Ile	Gly	Glu	Leu	Gly	Lys	Leu	Asp	Leu	Ile	245	250	255	
His	Glu	Ser	Ile	Leu	His	Lys	Cys	Ile	Lys	Thr	Leu	Leu	Glu	Lys	Lys	260	265	270	
Lys	Arg	Val	Gln	Leu	Lys	Asp	Met	Gly	Glu	Asp	Leu	Glu	Cys	Leu	Cys	275	280	285	
Gln	Ile	Met	Arg	Thr	Val	Gly	Pro	Arg	Leu	Asp	His	Glu	Arg	Ala	Lys	290	295	300	
Ser	Leu	Met	Asp	Gln	Tyr	Phe	Ala	Arg	Met	Cys	Ser	Leu	Met	Leu	Ser	305	310	315	320
Lys	Glu	Leu	Pro	Ala	Arg	Ile	Arg	Phe	Leu	Leu	Gln	Asp	Thr	Val	Glu	325	330	335	
Leu	Arg	Glu	His	His	Trp	Val	Pro	Arg	Lys	Ala	Phe	Leu	Asp	Asn	Gly	340	345	350	

650

Pro Lys Thr Ile Asn Gln Ile Arg Gln Asp Ala Val Lys Asp Leu Gly
 355 360 365
 Val Phe Ile Pro Ala Pro Met Ala Gln Gly Met Arg Ser Asp Phe Phe
 370 375 380
 Leu Glu Gly Pro Phe Met Pro Pro Arg Met Lys Met Asp Arg Asp Pro
 385 390 395 400
 Leu Gly Gly Leu Ala Asp Met Phe Gly Gln Met Pro Gly Ser Gly Ile
 405 410 415
 Gly Thr Gly Pro Gly Val Ile Gln Asp Arg Phe Ser Pro Thr Met Gly
 420 425 430
 Arg His Arg Ser Asn Gln Leu Phe Asn Gly His Gly Gly His Ile Met
 435 440 445
 Pro Pro Thr Gln Ser Gln Phe Gly Glu Met Gly Gly Lys Phe Met Lys
 450 455 460
 Ser Gln Gly Leu Ser Gln Leu Tyr His Asn Gln Ser Gln Gly Leu Leu
 465 470 475 480
 Ser Gln Leu Gln Gly Gln Ser Lys Asp Met Pro Pro Arg Phe Ser Lys
 485 490 495
 Lys Gly Gln Leu Asn Ala Asp Glu Ile Ser Leu Arg Pro Ala Gln Ser
 500 505 510
 Phe Leu Met Asn Lys Asn Gln Val Pro Lys Leu Gln Pro Gln Ile Thr
 515 520 525
 Met Ile Pro Pro Ser Ala Gln Pro Pro Arg Thr Gln Thr Pro Pro Leu
 530 535 540
 Gly Gln Thr Pro Gln Leu Gly Leu Lys Thr Asn Pro Pro Leu Ile Gln
 545 550 555 560
 Glu Lys Pro Ala Lys Thr Ser Lys Lys Pro Pro Pro Ser Lys Glu Glu
 565 570 575
 Leu Leu Lys Leu Thr Glu Thr Val Val Thr Glu Tyr Leu Asn Ser Gly
 580 585 590
 Asn Ala Asn Glu Ala Val Asn Gly Val Arg Glu Met Arg Ala Pro Lys
 595 600 605
 His Phe Leu Pro Glu Met Leu Ser Lys Val Ile Ile Leu Ser Leu Asp
 610 615 620

651

Arg	Ser	Asp	Glu	Asp	Lys	Glu	Lys	Ala	Ser	Ser	Leu	Ile	Ser	Leu	Leu	625	630	635	640
Lys	Gln	Glu	Gly	Ile	Ala	Thr	Ser	Asp	Asn	Phe	Met	Gln	Ala	Phe	Leu	645	650	655	
Asn	Val	Leu	Asp	Gln	Cys	Pro	Lys	Leu	Glu	Val	Asp	Ile	Pro	Leu	Val	660	665	670	
Lys	Ser	Tyr	Leu	Ala	Gln	Phe	Ala	Ala	Arg	Ala	Ile	Ile	Ser	Glu	Leu	675	680	685	
Val	Ser	Ile	Ser	Glu	Leu	Ala	Gln	Pro	Leu	Glu	Ser	Gly	Thr	His	Phe	690	695	700	
Pro	Leu	Phe	Leu	Leu	Cys	Leu	Gln	Gln	Leu	Ala	Lys	Leu	Gln	Asp	Arg	705	710	715	720
Glu	Trp	Leu	Thr	Glu	Leu	Phe	Gln	Gln	Ser	Lys	Val	Asn	Met	Gln	Lys	725	730	735	
Met	Leu	Pro	Glu	Ile	Asp	Gln	Asn	Lys	Asp	Arg	Met	Leu	Glu	Ile	Leu	740	745	750	
Glu	Gly	Lys	Gly	Leu	Ser	Phe	Leu	Phe	Pro	Leu	Leu	Lys	Leu	Glu	Lys	755	760	765	
Glu	Leu	Leu	Lys	Gln	Ile	Lys	Leu	Asp	Pro	Ser	Pro	Gln	Thr	Ile	Tyr	770	775	780	
Lys	Trp	Ile	Lys	Asp	Asn	Ile	Ser	Pro	Lys	Leu	His	Val	Asp	Lys	Gly	785	790	795	800
Phe	Val	Asn	Ile	Leu	Met	Thr	Ser	Phe	Leu	Gln	Tyr	Ile	Ser	Ser	Glu	805	810	815	
Val	Asn	Pro	Pro	Ser	Asp	Glu	Thr	Asp	Ser	Ser	Ser	Ala	Pro	Ser	Lys	820	825	830	
Glu	Gln	Leu	Glu	Gln	Glu	Lys	Gln	Leu	Leu	Leu	Ser	Phe	Lys	Pro	Val	835	840	845	
Met	Gln	Lys	Phe	Leu	His	Asp	His	Val	Asp	Leu	Gln	Val	Ser	Ala	Leu	850	855	860	
Tyr	Ala	Leu	Gln	Val	His	Cys	Tyr	Asn	Ser	Asn	Phe	Pro	Lys	Gly	Met	865	870	875	880
Leu	Leu	Arg	Phe	Phe	Val	His	Phe	Tyr	Asp	Met	Glu	Ile	Ile	Glu	Glu	885	890	895	

652

Glu Ala Phe Leu Ala Trp Lys Glu Asp Ile Thr Gln Glu Phe Pro Gly
 900 905 910

Lys Gly Lys Ala Leu Phe Gln Val Asn Gln Trp Leu Thr Trp Leu Glu
 915 920 925

Thr Ala Glu Glu Glu Glu Ser Glu Glu Glu Ala Asp
 930 935 940

<210> 679
 <211> 212
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (7)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (160)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (172)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 679
 Ser Trp Lys Glu Glu Glu Xaa Lys Pro His Leu Gln Gly Lys Pro Gly
 1 5 10 15

Arg Pro Leu Ser Pro Ala Asn Val Pro Ala Leu Pro Gly Glu Thr Val
 20 25 30

Thr Ser Pro Val Arg Leu His Pro Asp Tyr Leu Ser Pro Glu Glu Ile
 35 40 45

Gln Arg Gln Leu Gln Asp Ile Glu Arg Arg Leu Asp Ala Leu Glu Leu
 50 55 60

Arg Gly Val Glu Leu Glu Lys Arg Leu Arg Ala Ala Glu Gly Asp Asp
 65 70 75 80

Ala Glu Asp Ser Leu Met Val Asp Trp Phe Trp Leu Ile His Glu Lys
 85 90 95

Gln Leu Leu Leu Arg Gln Glu Ser Glu Leu Met Tyr Lys Ser Lys Ala

653

100 105 110
 Gln Arg Leu Glu Glu Gln Gln Leu Asp Ile Glu Gly Glu Leu Arg Arg
 115 120 125
 Leu Met Ala Lys Pro Glu Ala Leu Lys Ser Leu Gln Glu Arg Arg Arg
 130 135 140
 Glu Gln Glu Leu Leu Glu Gln Tyr Val Ser Thr Val Asn Asp Arg Xaa
 145 150 155 160
 Asp Ile Val Asp Ser Leu Asp Glu Asp Arg Leu Xaa Glu Gln Glu Glu
 165 170 175
 Asp Gln Met Leu Arg Asp Met Ile Glu Lys Leu Gly Leu Gln Arg Lys
 180 185 190
 Lys Ser Lys Phe Arg Leu Ser Lys Ile Trp Ser Pro Lys Ser Lys Ser
 195 200 205
 Ser Pro Ser Gln
 210

<210> 680

<211> 412

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (172)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (404)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 680

Val Ala Val Glu Leu Gly Ser Leu Arg Gly Gly Thr Met Ala Ser Glu
 1 5 10 15
 Lys Pro Leu Ala Ala Val Thr Cys Thr Ala Pro Val Asn Ile Ala Val
 20 25 30
 Ile Lys Tyr Trp Gly Lys Arg Asp Glu Glu Leu Val Leu Pro Ile Asn
 35 40 45
 Ser Ser Leu Ser Val Thr Leu His Gln Asp Gln Leu Lys Thr Thr Thr

654

50					55					60					
Thr	Ala	Val	Ile	Ser	Lys	Asp	Phe	Thr	Glu	Asp	Arg	Ile	Trp	Leu	Asn
65					70					75				80	
Gly	Arg	Glu	Glu	Asp	Val	Gly	Gln	Pro	Arg	Leu	Gln	Ala	Cys	Leu	Arg
				85					90					95	
Glu	Ile	Arg	Cys	Leu	Ala	Arg	Lys	Arg	Arg	Asn	Ser	Arg	Asp	Gly	Asp
			100					105					110		
Pro	Leu	Pro	Ser	Ser	Leu	Ser	Cys	Lys	Val	His	Val	Ala	Ser	Val	Asn
			115					120					125		
Asn	Phe	Pro	Thr	Ala	Ala	Gly	Leu	Ala	Ser	Ser	Ala	Ala	Gly	Tyr	Ala
			130				135					140			
Cys	Leu	Ala	Tyr	Thr	Leu	Ala	Arg	Val	Tyr	Gly	Val	Glu	Ser	Asp	Leu
145					150					155					160
Ser	Glu	Val	Ala	Arg	Arg	Gly	Ser	Gly	Ser	Ala	Xaa	Arg	Ser	Leu	Tyr
				165					170					175	
Gly	Gly	Phe	Val	Glu	Trp	Gln	Met	Gly	Glu	Gln	Ala	Asp	Gly	Lys	Asp
			180					185					190		
Ser	Ile	Ala	Arg	Gln	Val	Ala	Pro	Glu	Ser	His	Trp	Pro	Glu	Leu	Arg
			195				200					205			
Val	Leu	Ile	Leu	Val	Val	Ser	Ala	Glu	Lys	Lys	Leu	Thr	Gly	Ser	Thr
			210				215					220			
Val	Gly	Met	Arg	Ala	Ser	Val	Glu	Thr	Ser	Pro	Leu	Leu	Arg	Phe	Arg
225					230					235					240
Ala	Glu	Ser	Val	Val	Pro	Ala	Arg	Met	Ala	Glu	Met	Ala	Arg	Cys	Ile
				245					250					255	
Arg	Glu	Arg	Asp	Phe	Pro	Ser	Phe	Ala	Gln	Leu	Thr	Met	Lys	Asp	Ser
			260					265					270		
Asn	Gln	Phe	His	Ala	Thr	Cys	Leu	Asp	Thr	Phe	Pro	Pro	Ile	Ser	Tyr
			275				280					285			
Leu	Asn	Ala	Ile	Ser	Trp	Arg	Ile	Ile	His	Leu	Val	His	Arg	Phe	Asn
			290				295					300			
Ala	His	His	Gly	Asp	Thr	Lys	Val	Ala	Tyr	Thr	Phe	Asp	Ala	Gly	Pro
305					310					315					320
Asn	Ala	Val	Ile	Phe	Thr	Leu	Asp	Asp	Thr	Val	Ala	Glu	Phe	Val	Ala

655

325								330				335					
Ala	Val	Trp	His	Gly	Phe	Pro	Pro	Gly	Ser	Asn	Gly	Asp	Thr	Phe	Leu		
340								345				350					
Lys	Gly	Leu	Gln	Val	Arg	Pro	Ala	Pro	Leu	Ser	Ala	Glu	Leu	Gln	Ala		
355								360				365					
Ala	Leu	Ala	Met	Glu	Pro	Thr	Pro	Gly	Gly	Val	Lys	Tyr	Ile	Ile	Val		
370								375				380					
Thr	Gln	Val	Gly	Pro	Gly	Pro	Gln	Ile	Leu	Asp	Asp	Pro	Cys	Ala	His		
385								390				395				400	
Leu	Leu	Gly	Xaa	Asp	Gly	Leu	Pro	Lys	Pro	Ala	Ala						
405								410									

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<210> 681
<211> 61
<212> PRT
<213> Homo sapiens
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<400> 681

Lys	Lys	Thr	Arg	His	Leu	Ser	Lys	Ile	Leu	Cys	Gly	Lys	Met	Thr	Val
1				5					10					15	
Asn	Lys	Met	Arg	Val	Ser	Gly	Pro	Phe	Val	Leu	Leu	Ser	Phe	Phe	Asp
			20					25					30		
Tyr	Lys	Phe	Leu	Leu	Thr	His	Thr	Ile	Met	Ser	Ala	Asn	Pro	Leu	Leu
		35					40					45			
Pro	Arg	Glu	Arg	Asn	Cys	Ala	Pro	Ser	Val	Leu	Leu	Pro			
	50					55					60				

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<210> 682
<211> 243
<212> PRT
<213> Homo sapiens
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```
<400> 682
Ser Ala Pro Pro Pro Pro Arg Arg Lys Thr Ala Pro Pro Ala His Arg
   1                   5               10                  15
Gln Arg Pro Pro Pro Gln Ser Pro Thr Ala Thr Gly Leu Gly Pro Ala
          20                25                 30
```

656

Ala Arg Ser Cys Leu Pro Gln Pro Pro Ser Arg Gly Pro Gln Pro Pro
 35 40 45
 Pro Thr Leu Pro His Gly Pro Gly Ala Met Ser Glu Leu Glu Gln Leu
 50 55 60
 Arg Gln Glu Ala Glu Gln Leu Arg Asn Gln Ile Arg Asp Ala Arg Lys
 65 70 75 80
 Ala Cys Gly Asp Ser Thr Leu Thr Gln Ile Thr Ala Gly Leu Asp Pro
 85 90 95
 Val Gly Arg Ile Gln Met Arg Thr Arg Arg Thr Leu Arg Gly His Leu
 100 105 110
 Ala Lys Ile Tyr Ala Met His Trp Gly Thr Asp Ser Arg Leu Leu Val
 115 120 125
 Ser Ala Ser Gln Asp Gly Lys Leu Ile Ile Trp Asp Ser Tyr Thr Thr
 130 135 140
 Asn Lys Val His Ala Ile Pro Leu Arg Ser Ser Trp Val Met Thr Cys
 145 150 155 160
 Ala Tyr Ala Pro Ser Gly Asn Phe Val Ala Cys Gly Gly Leu Asp Asn
 165 170 175
 Ile Cys Ser Ile Tyr Ser Leu Lys Thr Arg Glu Ala Thr Ser Gly Ser
 180 185 190
 Ala Gly Ser Cys Leu Ala Thr Leu Gly Thr Cys Arg Val Ala Ala Ser
 195 200 205
 Trp Met Thr Thr Lys Ser Ser Pro Ala Leu Gly Ile Pro Pro Val Pro
 210 215 220
 Cys Gly Thr Leu Arg Gln Ala Ser Arg Gln Trp Val Leu Leu Asp Thr
 225 230 235 240
 Val Gly Met

<210> 683

<211> 146

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

657

<222> (133)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 683

Asp Leu Glu Gly Asp Ala Gly Tyr Thr Gly Gly Leu Arg Gln Gly His
 1 5 10 15
 Ala Gly Gly Ala Gly Glu Leu Ala Arg Thr Leu Ala Leu Lys Pro Thr
 20 25 30
 Ser Leu Glu Leu Phe Arg Thr Lys Val Asn Ala Leu Thr Tyr Gly Glu
 35 40 45
 Val Leu Arg Leu Arg Gln Thr Glu Arg Leu His Gln Glu Gly Thr Leu
 50 55 60
 Ala Pro Pro Ile Leu Glu Leu Arg Glu Lys Leu Lys Pro Glu Leu Met
 65 70 75 80
 Gly Leu Ile Arg Gln Gln Arg Leu Leu Arg Leu Cys Glu Gly Thr Leu
 85 90 95
 Phe Arg Lys Ile Ser Ser Arg Arg Arg Gln Asp Lys Leu Trp Phe Cys
 100 105 110
 Cys Leu Ser Pro Asn His Lys Leu Leu Gln Tyr Gly Asp Met Glu Glu
 115 120 125
 Gly Ala Ser Ala Xaa Pro Trp Arg Val Cys Pro Ser Asn Ser Leu Trp
 130 135 140
 Pro Thr
 145

<210> 684

<211> 300

<212> PRT

<213> Homo sapiens

<400> 684

Val Tyr Ser Cys Gly Phe Gln Val Gln Ser Trp Ser Pro Arg Trp Ile
 1 5 10 15
 Trp Val Thr Thr Lys Ser Lys Ile Gly Ala Pro Arg Ser Ser Phe Cys
 20 25 30
 Trp His Arg Leu Pro Ser Thr Ser Gln Leu His Leu Cys Pro Ala Glu
 35 40 45

658

Gly Glu Ala Pro Ser Ala Gly Glu Ala Ala Pro Arg Ala Pro Thr Gly
 50 55 60
 Ser Glu Pro Lys Pro Gly Ala Leu Pro Trp Gly Pro Arg Ala Pro Asp
 65 70 75 80
 Ser Glu Gly Gly Gly Gly Ala Gly Ala Ala Asp Pro Ala Ala Asn Ala
 85 90 95
 Gly His Gly Ala Ser Ser Glu Ala Glu Cys Gly Cys Gln Arg Thr Leu
 100 105 110
 Arg Pro Met Pro Ser Thr Pro Gly Pro Gly Ala Ala Ala Val Arg Ala
 115 120 125
 Leu Gly Gln Leu Phe His Ile Ala Cys Phe Thr Cys His Gln Cys Ala
 130 135 140
 Gln Gln Leu Gln Gly Gln Gln Phe Tyr Ser Leu Glu Gly Ala Pro Tyr
 145 150 155 160
 Cys Glu Gly Cys Tyr Thr Asp Thr Leu Glu Lys Cys Asn Thr Cys Gly
 165 170 175
 Glu Pro Ile Thr Asp Arg Met Leu Arg Ala Thr Gly Lys Ala Tyr His
 180 185 190
 Pro His Cys Phe Thr Cys Val Val Cys Ala Arg Pro Leu Glu Gly Thr
 195 200 205
 Ser Phe Ile Val Asp Gln Ala Asn Arg Pro His Cys Val Pro Asp Tyr
 210 215 220
 His Lys Gln Tyr Ala Pro Arg Cys Ser Val Cys Ser Glu Pro Ile Met
 225 230 235 240
 Pro Glu Pro Gly Arg Asp Glu Thr Val Arg Val Val Ala Leu Asp Lys
 245 250 255
 Asn Phe His Met Lys Cys Tyr Lys Cys Glu Asp Cys Gly Lys Pro Leu
 260 265 270
 Ser Ile Glu Ala Asp Asp Asn Gly Cys Phe Pro Leu Asp Gly His Val
 275 280 285
 Leu Cys Arg Lys Cys His Thr Ala Arg Ala Gln Thr
 290 295 300

<210> 685

659

<211> 130
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (61)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 685

Ile	Arg	His	Glu	Asp	Cys	Pro	Thr	Pro	Ser	Gln	Cys	Val	Val	Ala	Arg
1				5					10					15	
Thr	Leu	Gly	Lys	Gln	Gln	Thr	Val	Met	Ala	Ile	Ala	Thr	Lys	Ile	Ala
			20					25					30		
Leu	Gln	Met	Asn	Cys	Lys	Met	Gly	Gly	Glu	Leu	Trp	Arg	Val	Asp	Ile
		35					40					45			
Pro	Leu	Lys	Leu	Val	Met	Ile	Val	Gly	Ile	Asp	Cys	Xaa	His	Asp	Met
	50					55					60				
Thr	Ala	Gly	Arg	Arg	Ser	Ile	Ala	Gly	Phe	Val	Ala	Ser	Ile	Asn	Glu
65					70					75					80
Gly	Met	Thr	Arg	Trp	Phe	Ser	Arg	Cys	Ile	Phe	Gln	Asp	Arg	Gly	Gln
				85					90					95	
Glu	Leu	Val	Asp	Gly	Leu	Lys	Val	Cys	Leu	Gln	Ala	Ala	Leu	Arg	Ala
			100					105					110		
Trp	Asn	Ser	Cys	Asn	Glu	Tyr	Met	Pro	Ser	Arg	Ile	Ile	Val	Tyr	Arg
	115						120					125			
Val	Ala														
	130														

<210> 686
 <211> 207
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (84)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 686

Ile Tyr Gln Val Tyr Asn Ala Leu Gln Glu Lys Val Gln Ala Val Cys

660

1	5	10	15
Ala Asp Val Glu Lys Ser Glu Arg Val Val Glu Ser Cys Gln Ala Glu	20	25	30
Val Asn Lys Leu Arg Arg Gln Ile Thr Gln Arg Lys Asn Glu Lys Glu	35	40	45
Gln Glu Arg Arg Leu Gln Gln Ala Val Leu Ser Arg Gln Met Pro Ser	50	55	60
Glu Ser Leu Asp Pro Ala Phe Ser Pro Arg Met Pro Ser Ser Gly Phe	65	70	75
Ala Ala Glu Xaa Arg Ser Thr Leu Gly Asp Ala Glu Ala Ser Asp Pro	85	90	95
Pro Pro Pro Tyr Ser Asp Phe His Pro Asn Asn Gln Glu Ser Thr Leu	100	105	110
Ser His Ser Arg Met Glu Arg Ser Val Phe Met Pro Arg Pro Gln Ala	115	120	125
Val Gly Ser Ser Asn Tyr Ala Ser Thr Ser Ala Gly Leu Lys Tyr Pro	130	135	140
Gly Ser Gly Ala Asp Leu Pro Pro Pro Gln Arg Ala Ala Gly Asp Ser	145	150	155
Gly Glu Asp Ser Asp Asp Ser Asp Tyr Glu Asn Leu Ile Asp Pro Thr	165	170	175
Glu Pro Ser Asn Ser Glu Tyr Ser His Ser Lys Asp Ser Arg Pro Met	180	185	190
Ala His Pro Asp Glu Asp Pro Arg Asn Thr Gln Thr Ser Gln Ile	195	200	205

<210> 687

<211> 101

<212> PRT

<213> Homo sapiens

<400> 687

Ala Arg Ala Gly Glu Glu Gly Val Val Thr Arg Trp Arg His Arg Leu	1	5	10	15
Gly Gln Gly Ala Cys Pro Trp Asp Arg Ser Arg Pro Met Glu Pro Pro	20	25	30	

661

Gly Arg Ser Ser Arg Ser Thr Ala Ser His Thr Leu His Gln Tyr Cys
35 40 45
Cys Pro Thr Gln Val Leu Asp Ser Met Lys Leu Thr Pro Ser Gly Arg
50 55 60
Leu Ala Glu Ser Arg Glu Glu Glu Glu Glu Glu Thr Glu Glu Glu
65 70 75 80
Glu Glu Glu Asp Ala His Gln Phe Cys Cys Pro Ala Ser Glu Cys Ser
85 90 95
Ser Pro Ser Ser Arg
100

<210> 688
<211> 62
<212> PRT
<213> Homo sapiens

<400> 688
Glu Arg Asn Ala Asp Pro Pro Asp Val Ser Leu Gly Lys Ala Val Asn
1 5 10 15
Gln Leu Ile Phe Ile Glu Asp Leu Leu Cys Pro Leu His Arg Val Ala
20 25 30
Ser Val Arg Glu Ser Trp Phe Phe Pro Arg Asn Thr Asp Phe Leu Ser
35 40 45
Gly Arg Leu His Val Phe Ile Tyr Phe His His Ser Arg Phe
50 55 60

<210> 689
<211> 549
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (1)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 689

Xaa Arg Trp Ala Cys Gly Xaa Leu Leu Leu Leu Val Arg Gly Gln Gly
1 5 10 15

Gln Asp Ser Ala Ser Pro Ile Arg Thr Thr His Thr Gly Gln Val Leu
20 25 30

Gly Ser Leu Val His Val Lys Gly Ala Asn Ala Gly Val Gln Thr Phe
35 40 45

Leu Gly Ile Pro Phe Ala Lys Pro Pro Leu Gly Pro Leu Arg Phe Ala
50 55 60

Pro	Pro	Glu	Pro	Pro	Glu	Ser	Trp	Ser	Gly	Val	Arg	Asp	Gly	Thr	Thr
65					70					75					80

His Pro Ala Met Cys Leu Gln Asp Leu Thr Ala Val Glu Ser Glu Phe
85 90 95

Leu Ser Gln Phe Asn Met Thr Phe Pro Ser Asp Ser Met Ser Glu Asp
100 105 110

Cys Leu Tyr Leu Ser Ile Tyr Thr Pro Ala His Ser His Glu Gly Ser
115 120 125

Asn Leu Pro Val Met Val Trp Ile His Gly Gly Ala Leu Val Phe Gly
130 135 140

Met Ala Ser Leu Tyr Asp Gly Ser Met Leu Ala Ala Leu Glu Asn Val
145 150 155 160

Val Val Val Ile Ile Gln Tyr Arg Leu Gly Val Leu Gly Phe Phe Ser
165 170 175

Thr Gly Asp Lys His Ala Thr Gly Asn Trp Gly Tyr Leu Asp Gln Val
180 185 190

Ala Ala Leu Arg Trp Val Gln Gln Asn Ile Ala His Phe Gly Gly Asn
195 200 205

Pro Asp Arg Val Thr Ile Phe Gly Glu Ser Ala Gly Gly Thr Ser Val
210 215 220

Ser Ser Leu Val Val Ser Pro Ile Ser Gln Gly Leu Phe His Gly Ala
225 230 235 240

Ile Met Glu Ser Gly Val Ala Leu Leu Pro Gly Leu Ile Ala Ser Ser
245 250 255

663

Ala	Asp	Val	Ile	Ser	Thr	Val	Val	Ala	Asn	Leu	Ser	Ala	Cys	Asp	Gln	260	265	270	
Val	Asp	Ser	Glu	Ala	Leu	Val	Gly	Cys	Leu	Arg	Gly	Lys	Ser	Lys	Glu	275	280	285	
Glu	Ile	Leu	Ala	Ile	Asn	Lys	Pro	Phe	Lys	Met	Ile	Pro	Gly	Val	Val	290	295	300	
Asp	Gly	Val	Phe	Leu	Pro	Arg	His	Pro	Gln	Glu	Leu	Leu	Ala	Ser	Ala	305	310	315	320
Asp	Phe	Gln	Pro	Val	Pro	Ser	Ile	Val	Gly	Val	Asn	Asn	Asn	Glu	Phe	325	330	335	
Gly	Trp	Leu	Ile	Pro	Lys	Val	Met	Arg	Ile	Tyr	Asp	Thr	Gln	Lys	Glu	340	345	350	
Met	Asp	Arg	Glu	Ala	Ser	Gln	Ala	Ala	Leu	Gln	Lys	Met	Leu	Thr	Leu	355	360	365	
Leu	Met	Leu	Pro	Pro	Thr	Phe	Gly	Asp	Leu	Leu	Arg	Glu	Glu	Tyr	Ile	370	375	380	
Gly	Asp	Asn	Gly	Asp	Pro	Gln	Thr	Leu	Gln	Ala	Gln	Phe	Gln	Glu	Met	385	390	395	400
Met	Ala	Asp	Ser	Met	Phe	Val	Ile	Pro	Ala	Leu	Gln	Val	Ala	His	Phe	405	410	415	
Gln	Cys	Ser	Arg	Ala	Pro	Val	Tyr	Phe	Tyr	Glu	Phe	Gln	His	Gln	Pro	420	425	430	
Ser	Trp	Leu	Lys	Asn	Ile	Arg	Pro	Pro	His	Met	Lys	Ala	Asp	His	Gly	435	440	445	
Asp	Glu	Leu	Pro	Phe	Val	Phe	Arg	Ser	Phe	Phe	Gly	Gly	Asn	Tyr	Ile	450	455	460	
Lys	Phe	Thr	Glu	Glu	Glu	Glu	Gln	Leu	Ser	Arg	Lys	Met	Met	Lys	Tyr	465	470	475	480
Trp	Ala	Asn	Phe	Ala	Arg	Asn	Gly	Asn	Pro	Asn	Gly	Glu	Gly	Leu	Pro	485	490	495	
His	Trp	Pro	Leu	Phe	Asp	Gln	Glu	Glu	Gln	Tyr	Leu	Gln	Leu	Asn	Leu	500	505	510	
Gln	Pro	Ala	Val	Gly	Arg	Ala	Leu	Lys	Ala	His	Arg	Leu	Gln	Phe	Trp	515	520	525	

664

Lys Lys Ala Leu Pro Gln Lys Ile Gln Glu Leu Glu Glu Pro Glu Glu
 530 535 540

Arg His Thr Glu Leu
 545

<210> 690
 <211> 155
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (36)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (46)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (50)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (85)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 690
 Ser His Arg Val Thr His Cys Pro Tyr Ala Val Ala Leu Pro Glu Val
 1 5 10 15

Ala Pro Ala Gln Pro Leu Thr Glu Ala Leu Arg Ala Leu Cys His Val
 20 25 30

Gly Leu Phe Xaa Phe Ala Phe Cys Ala Leu Phe Asp Cys Xaa Arg Pro
 35 40 45

Val Xaa Gln Lys Ser Cys Asp Leu Leu Leu Phe Leu Arg Asp Lys Ile
 50 55 60

Ala Ser Tyr Ser Ser Leu Arg Glu Ala Arg Gly Ser Pro Asn Thr Ala
 65 70 75 80

Ser Ala Glu Ala Xaa Leu Pro Arg Trp Arg Ala Gly Glu Gln Ala Gln
 85 90 95

665

Pro Pro Gly Asp Gln Glu Pro Glu Ala Val Leu Ala Met Leu Arg Ser
 100 105 110

Leu Asp Leu Glu Gly Leu Arg Ser Thr Leu Ala Glu Ser Ser Asp His
 115 120 125

Val Glu Lys Ser Pro Gln Ser Leu Leu Gln Asp Met Leu Ala Thr Gly
 130 135 140

Gly Phe Leu Gln Gly Asp Glu Ala Asp Cys Tyr
 145 150 155

<210> 691

<211> 149

<212> PRT

<213> Homo sapiens

<400> 691

Met Cys Leu Glu Arg Pro Leu Arg Glu Gly Pro Arg Val Met Glu Lys
 1 5 10 15

Glu Ala Trp Pro Gly Ser Leu Glu Gly Arg Gly Gly Gly Trp Arg His
 20 25 30

Leu Asp Cys Pro Leu Leu Ser His Thr Trp Gly Val Val Thr Pro Phe
 35 40 45

Thr Pro Ala Arg Leu Pro Ser Ala Phe His Glu Leu His Leu Leu Pro
 50 55 60

Thr Ser Leu Trp Arg Gly Trp Gly Pro Leu Ala Ser Thr Arg Gly Pro
 65 70 75 80

Ser Ala Ser Pro Lys Pro Glu Pro Ser Ala Pro Gly Glu Asn Lys Trp
 85 90 95

Leu Ser Phe Asp Thr Trp Gly Arg Arg Glu Ala Ala Gly Trp Arg Gln
 100 105 110

Ser Gln Gly Arg Asp Thr Thr Glu Gly Asp Pro Asp Ile Pro Arg Lys
 115 120 125

Phe Pro Ala Glu Gln Thr Ala Phe Gln Pro Glu Ala Cys Leu Asn Cys
 130 135 140

Val Met Cys Asn Asn
 145

666

<210> 692

<211> 218

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (160)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 692

Pro	Gly	Val	Lys	Leu	Trp	Asp	Val	Pro	Val	Met	Leu	Asp	His	Lys	Asp	1	5	10	15
Leu	Glu	Ala	Glu	Ile	His	Pro	Leu	Lys	Asn	Glu	Glu	Arg	Lys	Ser	Gln	20	25	30	
Glu	Asn	Leu	Gly	Asn	Pro	Ser	Lys	Asn	Glu	Asp	Asn	Val	Lys	Ser	Ala	35	40	45	
Pro	Pro	Gln	Ser	Arg	Leu	Ser	Arg	Cys	Arg	Ala	Ala	Ala	Phe	Phe	Leu	50	55	60	
Ser	Leu	Phe	Leu	Cys	Leu	Phe	Val	Val	Phe	Val	Val	Ser	Phe	Val	Ile	65	70	75	80
Pro	Cys	Pro	Asp	Arg	Pro	Ala	Ser	Gln	Arg	Met	Trp	Arg	Ile	Asp	Tyr	85	90	95	
Ser	Ala	Ala	Val	Ile	Tyr	Asp	Phe	Leu	Ala	Val	Asp	Asp	Ile	Asn	Gly	100	105	110	
Asp	Arg	Ile	Gln	Asp	Val	Leu	Phe	Leu	Tyr	Lys	Asn	Thr	Asn	Ser	Ser	115	120	125	
Asn	Asn	Phe	Ser	Arg	Ser	Cys	Val	Asp	Glu	Gly	Phe	Ser	Ser	Pro	Cys	130	135	140	
Thr	Phe	Ala	Ala	Ala	Val	Ser	Gly	Ala	Asn	Ala	Ala	Arg	Ser	Gly	Xaa	145	150	155	160
Asp	Leu	Trp	Pro	Lys	Thr	Trp	Pro	Ser	Trp	Ser	Val	Leu	Cys	Pro	Ser	165	170	175	
Gln	Glu	Ala	Val	Arg	His	Leu	Leu	Pro	Ala	Ser	Trp	Trp	Ala	Asp	Pro	180	185	190	
Val	Leu	Ser	Leu	Gln	Ser	Thr	Cys	Ser	Gln	Gly	Lys	Pro	Trp	Lys	Pro	195	200	205	

667

Gln Pro Ala Val Gln Gly Glu Trp Ser Ile
210 215

<210> 693
<211> 68
<212> PRT
<213> Homo sapiens

<400> 693
Ser Cys Asn Ser Ser Asn Asn Ile Leu Gln Leu Pro Tyr Arg Asn Arg
1 5 10 15
Ser Gly Arg Ala Lys Ser Asp Leu Gly Lys Val Ile Arg Tyr Arg Leu
20 25 30
Ser Ile Pro Phe Pro Lys Met Leu Gly Thr Arg Ser Ile Ser Asp Phe
35 40 45
Ile Ile Phe Phe Lys Val Trp Asn Ile Cys Ile Ile Leu Thr Ser Trp
50 55 60
Ala Ser Gln Ile
65

<210> 694
<211> 234
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (3)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (219)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 694
Cys Ala Xaa Xaa Leu Arg Gly Phe Asp Gln Gln Met Ser Ser Met Val

668

1	5	10	15
Ile Glu His Met Ala Ser His Gly Thr Arg Phe Leu Arg Gly Cys Ala	20	25	30
Pro Ser Arg Val Arg Arg Leu Pro Asp Gly Gln Leu Gln Val Thr Trp	35	40	45
Glu Asp Ser Thr Thr Gly Lys Glu Asp Thr Gly Thr Phe Asp Thr Val	50	55	60
Leu Trp Ala Ile Gly Arg Val Pro Asp Thr Arg Ser Leu Asn Leu Glu	65	70	75
Lys Ala Gly Val Asp Thr Ser Pro Asp Thr Gln Lys Ile Leu Val Asp	85	90	95
Ser Arg Glu Ala Thr Ser Val Pro His Ile Tyr Ala Ile Gly Asp Val	100	105	110
Val Glu Gly Arg Pro Glu Leu Thr Pro Thr Ala Ile Met Ala Gly Arg	115	120	125
Leu Leu Val Gln Arg Leu Phe Gly Gly Ser Ser Asp Leu Met Asp Tyr	130	135	140
Asp Asn Val Pro Thr Thr Val Phe Thr Pro Leu Glu Tyr Gly Cys Val	145	150	155
Gly Leu Ser Glu Glu Glu Ala Val Ala Arg His Gly Gln Glu His Val	165	170	175
Glu Val Tyr His Ala His Tyr Lys Pro Leu Glu Phe Thr Val Ala Gly	180	185	190
Arg Asp Ala Ser Gln Cys Tyr Val Lys Met Val Cys Leu Arg Glu Pro	195	200	205
Pro Gln Leu Val Leu Gly Leu His Phe Leu Xaa Pro Thr Gln Ala Asn	210	215	220
Tyr Ser Arg Ile Cys Ser Gly Asp Lys Cys	225	230	

<210> 695

<211> 460

<212> PRT

<213> Homo sapiens

669

<400> 695

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Pro Cys Pro Pro Arg Pro Gln Glu Leu Pro Gly Arg Ser Pro Ser Ser
 1              5              10              15

Trp Ser Ala Leu Gly Trp Pro Ala Ala Leu Gly Gly Gly Val Val Ala
      20              25              30

Val Ala Val Cys Glu Pro Val Ala Arg Leu Leu Trp Ala Gly Thr Leu
      35              40              45

Lys Ile Ala Ala Met Ala Glu Asn Gly Asp Asn Glu Lys Met Ala Ala
      50              55              60

Leu Glu Ala Lys Ile Cys His Gln Ile Glu Tyr Tyr Phe Gly Asp Phe
      65              70              75              80

Asn Leu Pro Arg Asp Lys Phe Leu Lys Glu Gln Ile Lys Leu Asp Glu
      85              90              95

Gly Trp Val Pro Leu Glu Ile Met Ile Lys Phe Asn Arg Leu Asn Arg
      100              105              110

Leu Thr Thr Asp Phe Asn Val Ile Val Glu Ala Leu Ser Lys Ser Lys
      115              120              125

Ala Glu Leu Met Glu Ile Ser Glu Asp Lys Thr Lys Ile Arg Arg Ser
      130              135              140

Pro Ser Lys Pro Leu Pro Glu Val Thr Asp Glu Tyr Lys Asn Asp Val
      145              150              155              160

Lys Asn Arg Ser Val Tyr Ile Lys Gly Phe Pro Thr Asp Ala Thr Leu
      165              170              175

Asp Asp Ile Lys Glu Trp Leu Glu Asp Lys Gly Gln Val Leu Asn Ile
      180              185              190

Gln Met Arg Arg Thr Leu His Lys Ala Phe Lys Gly Ser Ile Phe Val
      195              200              205

Val Phe Asp Ser Ile Glu Ser Ala Lys Lys Phe Val Glu Thr Pro Gly
      210              215              220

Gln Lys Tyr Lys Glu Thr Asp Leu Leu Ile Leu Phe Lys Asp Asp Tyr
      225              230              235              240

Phe Ala Lys Lys Asn Glu Glu Arg Lys Gln Asn Lys Val Glu Ala Lys
      245              250              255

Leu Arg Ala Lys Gln Glu Gln Glu Ala Lys Gln Lys Leu Glu Glu Asp
      260              265              270

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670

Ala Glu Met Lys Ser Leu Glu Glu Lys Ile Gly Cys Leu Leu Lys Phe
 275 280 285
 Ser Gly Asp Leu Asp Asp Gln Thr Cys Arg Glu Asp Leu His Ile Leu
 290 295 300
 Phe Ser Asn His Gly Glu Ile Lys Trp Ile Asp Phe Val Arg Gly Ala
 305 310 315 320
 Lys Glu Gly Ile Ile Leu Phe Lys Glu Lys Ala Lys Glu Ala Leu Gly
 325 330 335
 Lys Ala Lys Asp Ala Asn Asn Gly Asn Leu Gln Leu Arg Asn Lys Glu
 340 345 350
 Val Thr Trp Glu Val Leu Glu Gly Glu Val Glu Lys Glu Ala Leu Lys
 355 360 365
 Lys Ile Ile Glu Asp Gln Gln Glu Ser Leu Asn Lys Trp Lys Ser Lys
 370 375 380
 Gly Arg Arg Phe Lys Gly Lys Gly Lys Gly Asn Lys Ala Ala Gln Pro
 385 390 395 400
 Gly Ser Gly Lys Gly Lys Val Gln Phe Gln Gly Lys Lys Thr Lys Phe
 405 410 415
 Ala Ser Asp Asp Glu His Asp Glu His Asp Glu Asn Gly Ala Thr Gly
 420 425 430
 Pro Val Lys Arg Ala Arg Glu Glu Thr Asp Lys Glu Glu Pro Ala Ser
 435 440 445
 Lys Gln Gln Lys Thr Glu Asn Gly Ala Gly Asp Gln
 450 455 460

<210> 696

<211> 80

<212> PRT

<213> Homo sapiens

<400> 696

Gly Glu Glu Gly Val Gly Ser Pro Ser Gly Ile Leu Ala Thr Pro Leu
 1 5 10 15
 Arg Ser Ala Arg Gly Thr Thr His Thr His Thr His Thr His Thr His
 20 25 30

671

Thr His Ser His Thr His Ala His Phe Pro Ser Phe Pro Asp Pro Leu
 35 40 45

Phe Gln Ser Ser Pro Phe Ser Ser Gly Phe Ile Asp Glu Tyr Lys Tyr
 50 55 60

Pro His Leu Trp Pro Val Met Ser Val Thr Cys Cys Arg Phe Cys Val
 65 70 75 80

<210> 697

<211> 257

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 697

Trp Pro Arg Arg Pro Gly Pro His Leu Gly Val Leu Glu Phe Pro Gly
 1 5 10 15

Ala Gly Cys Gly Ala Ser Ala Ala Gly Trp Pro Ser Ala Xaa Met Leu
 20 25 30

Pro Gly Arg Gly Pro Arg Pro Phe Arg Ala Arg Leu Val Gly Arg Glu
 35 40 45

Leu Val Ser Met Leu Ala Arg Glu Leu Pro Ala Ala Val Ala Pro Ala
 50 55 60

Gly Pro Ala Ser Leu Ala Arg Trp Thr Leu Gly Phe Cys Asp Glu Arg
 65 70 75 80

Leu Val Pro Phe Asp His Ala Glu Ser Thr Tyr Gly Leu Tyr Arg Thr
 85 90 95

His Leu Leu Ser Arg Leu Pro Ile Pro Glu Ser Gln Val Ile Thr Ile
 100 105 110

Asn Pro Glu Leu Pro Val Glu Glu Ala Ala Glu Asp Tyr Ala Lys Lys
 115 120 125

Leu Arg Gln Ala Phe Gln Gly Asp Ser Ile Pro Val Phe Asp Leu Leu
 130 135 140

672

Ile Leu Gly Val Gly Pro Asp Gly His Thr Cys Ser Leu Phe Pro Asp
 145 150 155 160

His Pro Leu Leu Gln Glu Arg Glu Lys Ile Val Ala Pro Ile Ser Asp
 165 170 175

Ser Pro Lys Pro Pro Pro Gln Arg Val Thr Leu Thr Leu Pro Val Leu
 180 185 190

Asn Ala Ala Arg Thr Val Ile Phe Val Ala Thr Gly Glu Gly Lys Ala
 195 200 205

Ala Val Leu Lys Arg Ile Leu Glu Asp Gln Glu Glu Asn Pro Leu Pro
 210 215 220

Ala Ala Leu Val Gln Pro His Thr Gly Lys Leu Cys Trp Phe Leu Asp
 225 230 235 240

Glu Ala Ala Ala Arg Leu Leu Thr Val Pro Phe Glu Lys His Ser Thr
 245 250 255

Leu

<210> 698

<211> 68

<212> PRT

<213> Homo sapiens

<400> 698

Gln Tyr Lys Thr Pro Ala Val Asp Thr Thr Met Met Thr Phe His Glu
 1 5 10 15

Leu Val Phe Leu Val Leu Thr Ala Lys Phe Val Leu Phe Thr Gly Gln
 20 25 30

Ile Ser Asn Lys Val Leu Gly Leu Lys Ile His Gly Trp Thr Glu Val
 35 40 45

Pro Tyr Pro Leu Thr Met Glu Ala Gly Ala Thr Phe Trp Gly Tyr Leu
 50 55 60

Phe Leu Asn Phe
 65

<210> 699

673

<211> 360

<212> PRT

<213> Homo sapiens

<400> 699

```

Pro Cys Ser Ala Thr Thr Ala Trp Val Lys Ser Ser Ile Lys Thr His
  1              5              10              15

Leu Cys Ala Ser Leu Arg His Ile Arg Phe Leu Leu Ser Val Cys Leu
      20              25              30

Leu Cys Leu Val Ala Gly Thr Ala Val Ala Val Lys Met Ala Ser Thr
      35              40              45

Ser Arg Leu Asp Ala Leu Pro Arg Val Thr Cys Pro Asn His Pro Asp
      50              55              60

Ala Ile Leu Val Glu Asp Tyr Arg Ala Gly Asp Met Ile Cys Pro Glu
      65              70              75              80

Cys Gly Leu Val Val Gly Asp Arg Val Ile Asp Val Gly Ser Glu Trp
      85              90              95

Arg Thr Phe Ser Asn Asp Lys Ala Thr Lys Asp Pro Ser Arg Val Gly
      100             105             110

Asp Ser Gln Asn Pro Leu Leu Ser Asp Gly Asp Leu Ser Thr Met Ile
      115             120             125

Gly Lys Gly Thr Gly Ala Ala Ser Phe Asp Glu Phe Gly Asn Ser Lys
      130             135             140

Tyr Gln Asn Arg Arg Thr Met Ser Ser Ser Asp Arg Ala Met Met Asn
      145             150             155             160

Ala Phe Lys Glu Ile Thr Thr Met Ala Asp Arg Ile Asn Leu Pro Arg
      165             170             175

Asn Ile Val Asp Arg Thr Asn Asn Leu Phe Lys Gln Val Tyr Glu Gln
      180             185             190

Lys Ser Leu Lys Gly Arg Ala Asn Asp Ala Ile Ala Ser Ala Cys Leu
      195             200             205

Tyr Ile Ala Cys Arg Gln Glu Gly Val Pro Arg Thr Phe Lys Glu Ile
      210             215             220

Cys Ala Val Ser Arg Ile Ser Lys Lys Glu Ile Gly Arg Cys Phe Lys
      225             230             235             240

Leu Ile Leu Lys Ala Leu Glu Thr Ser Val Asp Leu Ile Thr Thr Gly

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674

245 250 255
Asp Phe Met Ser Arg Phe Cys Ser Asn Leu Cys Leu Pro Lys Gln Val
260 265 270
Gln Met Ala Ala Thr His Ile Ala Arg Lys Ala Val Glu Leu Asp Leu
275 280 285
Val Pro Gly Arg Ser Pro Ile Ser Val Ala Ala Ala Ala Ile Tyr Met
290 295 300
Ala Ser Gln Ala Ser Ala Glu Lys Arg Thr Gln Lys Glu Ile Gly Asp
305 310 315 320
Ile Ala Gly Val Ala Asp Val Thr Ile Arg Gln Ser Tyr Arg Leu Ile
325 330 335
Tyr Pro Arg Ala Pro Asp Leu Phe Pro Thr Asp Phe Lys Phe Asp Thr
340 345 350
Pro Val Asp Lys Leu Pro Gln Leu
355 360

<210> 700

<211> 364

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (13)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (353)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (360)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 700

675

Pro Ser Trp Leu Arg Ala Arg Ser Ser Arg Ser Trp Xaa Ala Ser Pro
 1 5 10 15
 Arg Gly Pro Gln Pro Pro Arg Ile Arg Ala Arg Ser Ala Xaa Pro Met
 20 25 30
 Glu Gly Ala Arg Val Phe Gly Ala Leu Gly Pro Ile Gly Pro Ser Ser
 35 40 45
 Pro Gly Leu Thr Leu Gly Gly Leu Ala Val Ser Glu His Arg Leu Ser
 50 55 60
 Asn Lys Leu Leu Ala Trp Ser Gly Val Leu Glu Trp Gln Glu Lys Arg
 65 70 75 80
 Arg Pro Tyr Ser Asp Ser Thr Ala Lys Leu Lys Arg Thr Leu Pro Cys
 85 90 95
 Gln Ala Tyr Val Asn Gln Gly Glu Asn Leu Glu Thr Asp Gln Trp Pro
 100 105 110
 Gln Lys Leu Ile Met Gln Leu Ile Pro Gln Gln Leu Leu Thr Thr Leu
 115 120 125
 Gly Pro Leu Phe Arg Asn Ser Gln Leu Ala Gln Phe His Phe Thr Asn
 130 135 140
 Arg Asp Cys Asp Ser Leu Lys Gly Leu Cys Arg Ile Met Gly Asn Gly
 145 150 155 160
 Phe Ala Gly Cys Met Leu Phe Pro His Ile Ser Pro Cys Glu Val Arg
 165 170 175
 Val Leu Met Leu Leu Tyr Ser Ser Lys Lys Lys Ile Phe Met Gly Leu
 180 185 190
 Ile Pro Tyr Asp Gln Ser Gly Phe Val Ser Ala Ile Arg Gln Val Ile
 195 200 205
 Thr Thr Arg Lys Gln Ala Val Gly Pro Gly Gly Val Asn Ser Gly Pro
 210 215 220
 Val Gln Ile Val Asn Asn Lys Phe Leu Ala Trp Ser Gly Val Met Glu
 225 230 235 240
 Trp Gln Glu Pro Arg Pro Glu Pro Asn Ser Arg Ser Lys Arg Trp Leu
 245 250 255
 Pro Ser His Val Tyr Val Asn Gln Gly Glu Ile Leu Arg Thr Glu Gln
 260 265 270

676

Trp Pro Arg Lys Leu Tyr Met Gln Leu Ile Pro Gln Gln Leu Leu Thr
 275 280 285

Thr Leu Val Pro Leu Phe Arg Asn Ser Arg Leu Val Gln Phe His Phe
 290 295 300

Thr Lys Asp Leu Glu Thr Leu Lys Ser Leu Cys Arg Ile Met Asp Asn
 305 310 315 320

Gly Phe Ala Gly Cys Val His Phe Ser Tyr Lys Ala Ser Cys Glu Ile
 325 330 335

Arg Val Leu Met Leu Leu Tyr Ser Ser Glu Lys Lys Ile Phe Ile Gly
 340 345 350

Xaa Ile Pro His Asp Gln Gly Xaa Phe Val Gln Arg
 355 360

<210> 701

<211> 156

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (33)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 701

Gly Thr Arg Gly Ile Leu His Val Ala Val Pro Ala Arg Gly Thr His
 1 5 10 15

Ala Gln Cys Cys Arg Asn Trp Thr Val Pro Asp Ser Gly Gln Gly Lys
 20 25 30

Xaa Val Met Leu Glu Gly Gln Gly Arg Leu Glu Arg Val His Ile Pro
 35 40 45

Leu Ser Ala Pro Ala Ser Ala Thr Val Gln Arg Pro Thr Gly Pro Gln
 50 55 60

Pro Val Ala Cys Pro His Cys Pro Val Pro Thr Ser Asn Ser Pro Gln
 65 70 75 80

Pro Leu Val Ala Ser Val Pro Cys Pro Leu Gly Phe Ser Ser Gln Pro
 85 90 95

Ser Gly Leu Gly Leu Cys Arg Lys Val Met Pro Thr Gly Thr Leu Leu
 100 105 110

677

Thr Pro Gly Ser Phe Met Asp Val Val Ser Glu Leu Arg Thr Arg Gly
 115 120 125

Cys Gln Met Phe Leu Ala Pro His Val Ser Phe Arg Thr Glu Gln Lys
 130 135 140

His Lys Asp Ser Ala Lys Ser Ser Leu Tyr Ser Leu
 145 150 155

<210> 702
 <211> 150
 <212> PRT
 <213> Homo sapiens

<400> 702
 Ala Gly His Gly Leu Gly Val Arg Ala Gly Leu Lys Glu Phe Ala Thr
 1 5 10 15

Asn Leu Thr Glu Ser Gly Val His Gly Ala Leu Leu Ala Leu Asp Glu
 20 25 30

Thr Phe Asp Tyr Ser Asp Leu Ala Leu Leu Leu Gln Ile Pro Thr Gln
 35 40 45

Asn Ala Gln Ala Arg Gln Leu Leu Glu Lys Glu Phe Ser Asn Leu Ile
 50 55 60

Ser Leu Gly Thr Asp Arg Arg Leu Asp Glu Asp Ser Ala Lys Ser Phe
 65 70 75 80

Ser Arg Ser Pro Ser Trp Arg Lys Met Phe Arg Glu Lys Asp Leu Arg
 85 90 95

Gly Val Thr Pro Asp Ser Ala Glu Met Leu Pro Pro Asn Phe Arg Ser
 100 105 110

Ala Ala Ala Gly Ala Leu Gly Ser Pro Gly Leu Pro Leu Arg Lys Leu
 115 120 125

Gln Pro Glu Gly Gln Thr Ser Gly Ser Ser Arg Ala Asp Gly Val Ser
 130 135 140

Val Arg Thr Tyr Ser Cys
 145 150

<210> 703

<211> 527
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (243)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (257)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (259)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (471)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (477)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (480)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (484)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (511)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (519)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 703
Cys Val Cys Val Glu Gly Val Glu Gly Pro Arg Cys Asp Lys Cys Thr

679

1	5	10	15
Arg Gly Tyr Ser Gly Val Phe Pro Asp Cys Thr Pro Cys His Gln Cys	20	25	30
Phe Ala Leu Trp Asp Val Ile Ile Ala Glu Leu Thr Asn Arg Thr His	35	40	45
Arg Phe Leu Glu Lys Ala Lys Ala Leu Lys Ile Ser Gly Val Ile Gly	50	55	60
Pro Tyr Arg Glu Thr Val Asp Ser Val Glu Arg Lys Val Ser Glu Ile	65	70	75
Lys Asp Ile Leu Ala Gln Ser Pro Ala Ala Glu Pro Leu Lys Asn Ile	85	90	95
Gly Asn Leu Phe Glu Glu Ala Glu Lys Leu Ile Lys Asp Val Thr Glu	100	105	110
Met Met Ala Gln Val Glu Val Lys Leu Ser Asp Thr Thr Ser Gln Ser	115	120	125
Asn Ser Thr Ala Lys Glu Leu Asp Ser Leu Gln Thr Glu Ala Glu Ser	130	135	140
Leu Asp Asn Thr Val Lys Glu Leu Ala Glu Gln Leu Glu Phe Ile Lys	145	150	155
Asn Ser Asp Ile Arg Gly Ala Leu Asp Ser Ile Thr Lys Tyr Phe Gln	165	170	175
Met Ser Leu Glu Ala Glu Glu Arg Val Asn Ala Ser Thr Thr Glu Pro	180	185	190
Asn Ser Thr Val Glu Gln Ser Ala Leu Met Arg Asp Arg Val Glu Asp	195	200	205
Val Met Met Glu Arg Glu Ser Gln Phe Lys Glu Lys Gln Glu Glu Gln	210	215	220
Ala Arg Leu Leu Asp Glu Leu Ala Gly Lys Leu Gln Ser Leu Asp Leu	225	230	235
Ser Ala Xaa Ala Glu Met Thr Cys Gly Thr Pro Pro Gly Ala Ser Cys	245	250	255
Xaa Glu Xaa Glu Cys Gly Gly Pro Asn Cys Arg Thr Asp Glu Gly Glu	260	265	270
Arg Lys Cys Gly Gly Pro Gly Cys Gly Gly Leu Val Thr Val Ala His			

680

275	280	285
Asn Ala Trp Gln Lys Ala Met Asp Leu Asp Gln Asp Val Leu Ser Ala 290 295 300		
Leu Ala Glu Val Glu Gln Leu Ser Lys Met Val Ser Glu Ala Lys Leu 305 310 315 320		
Arg Ala Asp Glu Ala Lys Gln Ser Ala Glu Asp Ile Leu Leu Lys Thr 325 330 335		
Asn Ala Thr Lys Glu Lys Met Asp Lys Ser Asn Glu Glu Leu Arg Asn 340 345 350		
Leu Ile Lys Gln Ile Arg Asn Phe Leu Thr Gln Asp Ser Ala Asp Leu 355 360 365		
Asp Ser Ile Glu Ala Val Ala Asn Glu Val Leu Lys Met Glu Met Pro 370 375 380		
Ser Thr Pro Gln Gln Leu Gln Asn Leu Thr Glu Asp Ile Arg Glu Arg 385 390 395 400		
Val Glu Ser Leu Ser Gln Val Glu Val Ile Leu Gln His Ser Ala Ala 405 410 415		
Asp Ile Ala Arg Ala Glu Met Leu Leu Glu Glu Ala Lys Arg Ala Ser 420 425 430		
Lys Ser Ala Thr Asp Val Lys Val Thr Ala Asp Met Val Lys Glu Ala 435 440 445		
Leu Glu Glu Ala Glu Lys Ala Gln Val Ala Ala Glu Lys Ala Ile Lys 450 455 460		
Gln Ala Asp Glu Asp Ile Xaa Arg Asn Pro Glu Pro Xaa Asn Phe Xaa 465 470 475 480		
Leu Glu Phe Xaa Lys Gln Gln Leu Ser Gly Gly Asn Leu Val Gln Arg 485 490 495		
Val Pro Arg Ala Ser Ser Glu Phe Arg Glu Asp Val Gly Arg Xaa Leu 500 505 510		
Ser Gly Lys Leu Ala Gln Xaa Pro Gly Gly Gly Arg Ile Phe Trp 515 520 525		

<210> 704

<211> 62

681

<212> PRT

<213> Homo sapiens

<400> 704

```

Val Tyr Gln Arg Lys Ser Thr Val Val Leu Gly Gly Phe Leu Leu Trp
  1              5              10              15

Asp Ile Asp Phe Leu Phe Phe Phe Arg Asn Ile Val Cys Cys Asn Leu
      20              25              30

Asn Lys Asn Tyr Asp Ile Leu Arg Tyr Phe Ile Asp Lys Pro Asn Lys
      35              40              45

Asn Ile Cys Phe Tyr Phe Lys Val Asn Val Phe Leu Phe Ser
      50              55              60

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<210> 705

<211> 44

<212> PRT

<213> Homo sapiens

<400> 705

```

Thr Glu Asp Leu Phe Gly Phe Lys His Leu Leu Arg Gln Tyr Leu Leu
  1              5              10              15

Gly Lys Pro Asn Ile Ala Asn Gly Gln Phe Asp Phe Asn Phe Ser Lys
      20              25              30

Asp Thr Leu Leu Ser Arg Arg Leu Lys Cys Leu His
      35              40

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<210> 706

<211> 193

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 706

```

Xaa Gly Arg Ala Trp Val Met Ala Ala Pro Gly Ala Leu Leu Val Met
  1              5              10              15

Gly Val Ser Gly Ser Gly Lys Ser Thr Val Gly Ala Leu Leu Ala Ser
      20              25              30

```

682

Glu Leu Gly Trp Lys Phe Tyr Asp Ala Asp Asp Tyr His Pro Glu Glu
 35 40 45
 Asn Arg Arg Lys Met Gly Lys Gly Ile Pro Leu Asn Asp Gln Asp Arg
 50 55 60
 Ile Pro Trp Leu Cys Asn Leu His Asp Ile Leu Leu Arg Asp Val Ala
 65 70 75 80
 Ser Gly Gln Arg Val Val Leu Ala Cys Ser Ala Leu Lys Lys Thr Tyr
 85 90 95
 Arg Asp Ile Leu Thr Gln Gly Lys Asp Gly Val Ala Leu Lys Cys Glu
 100 105 110
 Glu Ser Gly Lys Glu Ala Lys Gln Ala Glu Met Gln Leu Leu Val Val
 115 120 125
 His Leu Ser Gly Ser Phe Glu Val Ile Ser Gly Arg Leu Leu Lys Arg
 130 135 140
 Glu Gly His Phe Met Pro Pro Glu Leu Leu Gln Ser Gln Phe Glu Thr
 145 150 155 160
 Leu Glu Pro Pro Ala Ala Pro Glu Asn Phe Ile Gln Ile Ser Val Asp
 165 170 175
 Lys Asn Val Ser Glu Ile Ile Ala Thr Ile Met Glu Thr Leu Lys Met
 180 185 190
 Lys

<210> 707

<211> 121

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (102)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (103)

<223> Xaa equals any of the naturally occurring L-amino acids

683

<400> 707

Gly Ile Arg Gly Gln Thr Leu Trp Leu Gly Pro Leu Gly Ala Thr Leu
 1 5 10 15
 Trp Pro Leu Gly Ala Leu Glu Thr Ser His Val Leu Trp Ala Leu Trp
 20 25 30
 Arg Ala Leu Ala Leu His Gly Gly Ala Gly Arg His Cys Leu Pro Cys
 35 40 45
 Pro Leu Pro Ala Ala Pro Ala Leu Val Cys Arg Leu Gly Pro Gly Cys
 50 55 60
 Leu Leu Leu Gly Val Trp Pro Arg Ala Pro Val Lys Pro Trp Arg His
 65 70 75 80
 Cys Val Cys Val Met Gly Ser Glu Gly Leu Val Gly Ala Val His Trp
 85 90 95
 Ser Ser Ser Leu Pro Xaa Xaa Ala Ile Ser Met Ala Pro Phe Ala Ala
 100 105 110
 Glu Asp Thr His Cys Gly Ser Val Gly
 115 120

<210> 708

<211> 112

<212> PRT

<213> Homo sapiens

<400> 708

Asn Ser Phe Cys Tyr Phe His Ile Arg Val Gln Thr Tyr Lys Gly Ala
 1 5 10 15
 Cys Ser Leu Lys Val His Asn Tyr Ser Tyr Ser Val Cys Leu Tyr Cys
 20 25 30
 Tyr Arg Met Leu Cys Phe Gly Ala Leu Ser Ser Ala Asp Pro Arg Ser
 35 40 45
 Ser Val Glu Ile His Cys Leu Gly His Ser Leu Ile Arg Met Leu Ala
 50 55 60
 Gly Asp Phe Val Ser Asp Val Ala Ser Leu Phe Ser Val His Arg Leu
 65 70 75 80
 Arg Val Thr Thr Val Ala Cys Arg Val His Pro Val Gly Ala Ala Gln
 85 90 95

684

Leu Ser Glu Ser Lys Asn Leu Pro Thr Tyr Ser Asn Val Phe Ala Leu
 100 105 110

<210> 709

<211> 72

<212> PRT

<213> Homo sapiens

<400> 709

Arg Arg Val Trp Val Leu Phe Pro Pro Gln Arg Pro Glu Ser Gly Trp
 1 5 10 15

Gly Val Ser Pro Val Glu Gly Glu Thr Val Pro Ala Leu Arg Gly Met
 20 25 30

Lys Lys Ser Val Gly Leu Pro Val Ala Val Gln Cys Val Ala Leu Pro
 35 40 45

Trp Gln Glu Glu Leu Cys Leu Arg Phe Met Arg Glu Val Glu Arg Leu
 50 55 60

Met Thr Pro Glu Lys Gln Ser Ser
 65 70

<210> 710

<211> 84

<212> PRT

<213> Homo sapiens

<400> 710

Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp
 1 5 10 15

Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Val Ser Ala Ala
 20 25 30

Gly Ala Ala Ala Gln Gln Val Val Asp Gln Ala Thr Glu Ala Gly Gln
 35 40 45

Lys Ala Met Asp Gln Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys
 50 55 60

Thr Ala Asn Gln Ala Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe
 65 70 75 80

685

Gly Leu Leu Lys

<210> 711

<211> 63

<212> PRT

<213> Homo sapiens

<400> 711

Arg Leu His Arg Tyr Pro Glu Ala Met Ala Ser Lys Gly Leu Gln Asp
 1 5 10 15

Leu Lys Gln Gln Val Glu Gly Thr Ala Gln Glu Ala Ala Met Asp Gln
 20 25 30

Leu Ala Lys Thr Thr Gln Glu Thr Ile Asp Lys Thr Ala Asn Gln Ala
 35 40 45

Ser Asp Thr Phe Ser Gly Ile Gly Lys Lys Phe Gly Leu Leu Lys
 50 55 60

<210> 712

<211> 86

<212> PRT

<213> Homo sapiens

<400> 712

Arg Leu Ala Asn Arg Ala Ile Met Ser His Lys Gln Ile Tyr Tyr Ser
 1 5 10 15

Asp Lys Tyr Asp Asp Glu Glu Phe Glu Tyr Arg His Val Met Leu Pro
 20 25 30

Lys Asp Ile Ala Lys Leu Val Pro Lys Thr His Leu Met Ser Glu Ser
 35 40 45

Glu Trp Arg Asn Leu Gly Val Gln Gln Ser Gln Gly Trp Val His Tyr
 50 55 60

Met Ile His Glu Pro Glu Pro His Ile Leu Leu Phe Arg Arg Pro Leu
 65 70 75 80

Pro Lys Lys Pro Lys Lys
 85

686

<210> 713
 <211> 193
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (129)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 713
 Val Gln Lys Ala Gly Ala Arg Ala Leu Ala Val Ala Gly Ala Ala Arg
 1 5 10 15
 Thr Pro Arg Ser Leu Pro Gly Arg Pro Ala Val Cys Asn Met Thr Leu
 20 25 30
 Glu Glu Phe Ser Ala Gly Glu Gln Lys Thr Glu Arg Met Asp Lys Val
 35 40 45
 Gly Asp Ala Leu Glu Glu Val Leu Ser Lys Ala Leu Ser Gln Arg Thr
 50 55 60
 Ile Thr Val Gly Val Tyr Glu Ala Ala Lys Leu Leu Asn Val Asp Pro
 65 70 75 80
 Asp Asn Val Val Leu Cys Leu Leu Ala Ala Asp Glu Asp Asp Asp Arg
 85 90 95
 Asp Val Ala Leu Gln Ile His Phe Thr Leu Ile Gln Ala Phe Cys Cys
 100 105 110
 Glu Asn Asp Ile Asn Ile Leu Arg Val Thr Thr Arg Ala Gly Trp Arg
 115 120 125
 Xaa Pro Ala Leu Gly Asp Arg Arg Trp Pro Arg Gly Glu Arg Gly Arg
 130 135 140
 Arg Ala Ala Pro Gly Pro Ala Leu Arg Val Val Thr Asn Pro His Ser
 145 150 155 160
 Ser Gln Trp Lys Asp Pro Ala Leu Ser Gln Leu Ile Cys Phe Cys Arg
 165 170 175
 Glu Ser Arg Tyr Met Asp Gln Trp Val Pro Val Ile Asn Leu Pro Glu
 180 185 190

Arg

687

<210> 714
 <211> 200
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (90)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (93)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (190)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 714
 Gly Pro Gly Ala Cys Ser Gly Pro Ala Pro Ser Pro Arg Arg Pro Gln
 1 5 10 15
 Ser Val Lys Cys Glu Pro Arg Arg Arg Gly Arg Ile Trp Pro Gly Ala
 20 25 30
 Gly Gly Gly Val Gly Ala Ala Arg His Val His His His Gln Gly Ala
 35 40 45
 Gln Gln Ala Gly Arg Ala Ala Pro His Arg Ser His Ala Ala Ala Gly
 50 55 60
 Gly Gly Pro Ala Arg Arg Ala Pro Glu Met Pro Ala Ala Arg Ala Ala
 65 70 75 80
 Asp Leu Ala Ala Pro Ala Gly Ala Ala Xaa Cys Ala Xaa Pro Gly Pro
 85 90 95
 Trp Pro Leu Ser Ser Pro Gly Pro Arg Leu Val Phe Asn Arg Val Asn
 100 105 110
 Gly Arg Arg Ala Pro Ser Thr Ser Pro Ser Phe Glu Gly Thr Gln Glu
 115 120 125
 Thr Tyr Thr Val Ala His Glu Glu Asn Val Arg Phe Val Ser Glu Ala
 130 135 140
 Trp Gln Gln Val Gln Gln Gln Leu Asp Gly Gly Pro Ala Gly Glu Gly

688

145 150 155 160
 Gly Pro Arg Pro Val Gln Tyr Val Glu Arg Thr Pro Asn Pro Arg Leu
 165 170 175
 Gln Asn Phe Val Pro Ile Asp Leu Asp Glu Trp Trp Ala Xaa Gln Phe
 180 185 190
 Leu Ala Arg Ile Thr Ser Cys Ser
 195 200

<210> 715

<211> 106

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 715

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Leu Val Pro Xaa Leu
 1 5 10 15

Trp Ser Arg Glu Glu Ala Met Ala Thr Met Glu Asn Lys Val Ile Cys
 20 25 30

Ala Leu Val Leu Val Ser Met Leu Ala Leu Gly Thr Leu Ala Glu Ala
 35 40 45

Gln Thr Glu Thr Cys Thr Val Ala Pro Arg Glu Arg Gln Asn Cys Gly
 50 55 60

Phe Pro Gly Val Thr Pro Ser Gln Cys Ala Asn Lys Gly Cys Cys Phe
 65 70 75 80

Asp Asp Thr Val Arg Gly Val Pro Trp Cys Phe Tyr Pro Asn Thr Ile
 85 90 95

Asp Val Pro Pro Glu Glu Glu Cys Glu Phe
 100 105

<210> 716

<211> 105

<212> PRT

<213> Homo sapiens

689

<400> 716

Glu Gly Arg Glu Ala Gly Ser Gly Leu Ser Val Asp Ser Arg Asp Lys
 1 5 10 15

Gly His Glu Gly Arg Gly Leu Gly Pro Phe Arg Ile Pro Gln Asp Ser
 20 25 30

Gln Val Gln Leu Cys Gln Lys Gly Thr Phe His Val Met Gln Leu Arg
 35 40 45

Gly Leu Ser Leu Asn Pro Arg Leu Leu Leu Thr Leu Gly Ser Phe Asn
 50 55 60

Gln Val Gly Gln Pro Leu Leu Gln Arg Gly Val Gly Trp Leu Ser Ser
 65 70 75 80

Leu Ser His Ala Ala Cys Glu Asp Arg Gly Gly Gly Val Gly Ser Gly
 85 90 95

Lys Ser Pro Glu Asn Arg Arg Gly Ile
 100 105

<210> 717

<211> 431

<212> PRT

<213> Homo sapiens

<400> 717

Arg Ala Ala Gly Ile Arg His Glu Arg Gly Gly Pro Thr Gly Ser Cys
 1 5 10 15

Pro Gly Leu Pro Ser Pro Pro Met Val Leu Tyr Ile Lys Tyr Pro Gly
 20 25 30

Trp Arg Ser His Met Leu Leu Thr Glu Gly Gly Asn Tyr His Ser Ser
 35 40 45

Leu Gly Thr Arg Cys Glu Leu Ser Cys Asp Arg Gly Phe Arg Leu Ile
 50 55 60

Gly Arg Arg Ser Val Gln Cys Leu Pro Ser Arg Arg Trp Ser Gly Thr
 65 70 75 80

Ala Tyr Cys Arg Gln Met Arg Cys His Ala Leu Pro Phe Ile Thr Ser
 85 90 95

Gly Thr Tyr Thr Cys Thr Asn Gly Val Leu Leu Asp Ser Arg Cys Asp
 100 105 110

690

Tyr	Ser	Cys	Ser	Ser	Gly	Tyr	His	Leu	Glu	Gly	Asp	Arg	Ser	Arg	Ile	115	120	125	
Cys	Met	Glu	Asp	Gly	Arg	Trp	Ser	Gly	Gly	Glu	Pro	Val	Cys	Val	Asp	130	135	140	
Ile	Asp	Pro	Pro	Lys	Ile	Arg	Cys	Pro	His	Ser	Arg	Glu	Lys	Met	Ala	145	150	155	160
Glu	Pro	Glu	Lys	Leu	Thr	Ala	Arg	Val	Tyr	Trp	Asp	Pro	Pro	Leu	Val	165	170	175	
Lys	Asp	Ser	Ala	Asp	Gly	Thr	Ile	Thr	Arg	Val	Thr	Leu	Arg	Gly	Pro	180	185	190	
Glu	Pro	Gly	Ser	His	Phe	Pro	Glu	Gly	Glu	His	Val	Ile	Arg	Tyr	Thr	195	200	205	
Ala	Tyr	Asp	Arg	Ala	Tyr	Asn	Arg	Ala	Ser	Cys	Lys	Phe	Ile	Val	Lys	210	215	220	
Val	Gln	Val	Arg	Arg	Cys	Pro	Thr	Leu	Lys	Pro	Pro	Gln	His	Gly	Tyr	225	230	235	240
Leu	Thr	Cys	Thr	Ser	Ala	Gly	Asp	Asn	Tyr	Gly	Ala	Thr	Cys	Glu	Tyr	245	250	255	
His	Cys	Asp	Gly	Gly	Tyr	Asp	Arg	Gln	Gly	Thr	Pro	Ser	Arg	Val	Cys	260	265	270	
Gln	Ser	Ser	Arg	Gln	Trp	Ser	Gly	Ser	Pro	Pro	Ile	Cys	Ala	Pro	Met	275	280	285	
Lys	Ile	Asn	Val	Asn	Val	Asn	Ser	Ala	Ala	Gly	Leu	Leu	Asp	Gln	Phe	290	295	300	
Tyr	Glu	Lys	Gln	Arg	Leu	Leu	Ile	Ile	Ser	Ala	Pro	Asp	Pro	Ser	Asn	305	310	315	320
Arg	Tyr	Tyr	Lys	Met	Gln	Ile	Ser	Met	Leu	Gln	Gln	Ser	Thr	Cys	Gly	325	330	335	
Leu	Asp	Leu	Arg	His	Val	Thr	Ile	Ile	Glu	Leu	Val	Gly	Gln	Pro	Pro	340	345	350	
Gln	Glu	Val	Gly	Arg	Ile	Arg	Glu	Gln	Gln	Leu	Ser	Ala	Asn	Ile	Ile	355	360	365	
Glu	Glu	Leu	Arg	Gln	Phe	Gln	Arg	Leu	Thr	Arg	Ser	Tyr	Phe	Asn	Met	370	375	380	

691

Val Leu Ile Asp Lys Gln Gly Ile Asp Arg Asp Arg Tyr Met Glu Pro
 385 390 395 400

Val Thr Pro Glu Glu Ile Phe Thr Phe Ile Asp Asp Tyr Leu Leu Ser
 405 410 415

Asn Gln Glu Leu Thr Gln Arg Arg Glu Gln Arg Asp Ile Cys Glu
 420 425 430

<210> 718

<211> 417

<212> PRT

<213> Homo sapiens

<400> 718

Gln Gly Leu Pro Asp Gly Val Trp Ala His Gly Thr Cys Pro Gly His
 1 5 10 15

Arg Leu Val Ser Ser Gln Arg Arg Ile Ile Ala Ser Gly Ser Glu Asp
 20 25 30

Cys Thr Val Met Val Trp Gln Ile Pro Glu Asn Gly Leu Thr Ser Pro
 35 40 45

Leu Thr Glu Pro Val Val Val Leu Glu Gly His Thr Lys Arg Val Gly
 50 55 60

Ile Ile Ala Trp His Pro Thr Ala Arg Asn Val Leu Leu Ser Ala Gly
 65 70 75 80

Cys Asp Asn Val Val Leu Ile Trp Asn Val Gly Thr Ala Glu Glu Leu
 85 90 95

Tyr Arg Leu Asp Ser Leu His Pro Asp Leu Ile Tyr Asn Val Ser Trp
 100 105 110

Asn His Asn Gly Ser Leu Phe Cys Ser Ala Cys Lys Asp Lys Ser Val
 115 120 125

Arg Ile Ile Asp Pro Arg Arg Gly Thr Leu Val Ala Glu Arg Glu Lys
 130 135 140

Ala His Glu Gly Ala Arg Pro Met Arg Ala Ile Phe Leu Ala Asp Gly
 145 150 155 160

Lys Val Phe Thr Thr Gly Phe Ser Arg Met Ser Glu Arg Gln Leu Ala
 165 170 175

692

Leu Trp Asp Pro Glu Asn Leu Glu Glu Pro Met Ala Leu Gln Glu Leu
 180 185 190
 Asp Ser Ser Asn Gly Ala Leu Leu Pro Phe Tyr Asp Pro Asp Thr Ser
 195 200 205
 Val Val Tyr Val Cys Gly Lys Gly Asp Ser Ser Ile Arg Tyr Phe Glu
 210 215 220
 Ile Thr Glu Glu Pro Pro Tyr Ile His Phe Leu Asn Thr Phe Thr Ser
 225 230 235 240
 Lys Glu Pro Gln Arg Gly Met Gly Ser Met Pro Lys Arg Gly Leu Glu
 245 250 255
 Val Ser Lys Cys Glu Ile Ala Arg Phe Tyr Lys Leu His Glu Arg Lys
 260 265 270
 Cys Glu Pro Ile Val Met Thr Val Pro Arg Lys Ser Asp Leu Phe Gln
 275 280 285
 Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro Glu Ala Ala Leu Glu Ala
 290 295 300
 Glu Glu Trp Val Ser Gly Arg Asp Ala Asp Pro Ile Leu Ile Ser Leu
 305 310 315 320
 Arg Glu Ala Tyr Val Pro Ser Lys Gln Arg Asp Leu Lys Ile Ser Arg
 325 330 335
 Arg Asn Val Leu Ser Asp Ser Arg Pro Ala Met Ala Pro Gly Ser Ser
 340 345 350
 His Leu Gly Ala Pro Ala Ser Thr Thr Thr Ala Ala Asp Ala Thr Pro
 355 360 365
 Ser Gly Ser Leu Ala Arg Ala Gly Glu Ala Gly Lys Leu Glu Glu Val
 370 375 380
 Met Gln Glu Leu Arg Ala Leu Arg Ala Leu Val Lys Glu Gln Gly Asp
 385 390 395 400
 Arg Ile Cys Arg Leu Glu Glu Gln Leu Gly Arg Met Glu Asn Gly Asp
 405 410 415
 Ala

<210> 719

693

<211> 290
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (7)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (74)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (131)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 719
 Glu Leu Ser Ala Ser Ala Xaa Asp Asp Gly Asn Phe Ser Leu Leu Ile
 1 5 10 15
 Arg Ala Val Glu Glu Thr Asp Ala Gly Leu Tyr Thr Cys Asn Leu His
 20 25 30
 His His Tyr Cys His Leu Tyr Glu Ser Leu Ala Val Arg Leu Glu Val
 35 40 45
 Thr Asp Gly Pro Pro Ala Pro Pro Pro Thr Gly Thr Ala Arg Arg Arg
 50 55 60
 Cys Trp Arg Trp Arg Ala Ala Pro Ala Xaa Leu Thr Cys Val Asn Arg
 65 70 75 80
 Gly His Val Trp Thr Asp Arg His Val Glu Glu Ala Gln Gln Val Val
 85 90 95
 His Trp Asp Arg Gln Pro Pro Gly Val Pro His Asp Arg Ala Asp Arg
 100 105 110
 Leu Leu Asp Leu Tyr Ala Ser Ala Ser Ala Ala Leu Arg Ala Pro Phe
 115 120 125
 Ser Ala Xaa Arg Val Ala Val Gly Ala Asp Ala Phe Lys Arg Gly Asp
 130 135 140
 Phe Ser Leu Arg Ile Glu Pro Leu Glu Val Ala Asp Glu Gly Thr Tyr
 145 150 155 160
 Ser Cys His Leu His His His Tyr Trp Arg Ala Ala Thr Thr Ser Ser

694

	165		170		175
Met Ser Ser Ser Pro Arg Ala Glu Pro Thr Ser Ser Ser Ser Trp Ala					
	180		185		190
Thr Cys Trp Pro Arg Cys Cys Ser Ser Ser Cys Tyr Trp Ser Leu Ser					
	195		200		205
Ser Trp Pro Pro Ala Gly Arg Gly Gly Tyr Glu Tyr Ser Asp Gln Lys					
	210		215		220
Ser Gly Lys Ser Lys Gly Lys Asp Val Asn Leu Ala Glu Phe Ala Val					
	225		230		240
Ala Ala Gly Asp Gln Met Leu Tyr Arg Ser Glu Asp Ile Gln Leu Asp					
	245		250		255
Tyr Lys Asn Asn Ile Leu Lys Glu Arg Ala Glu Leu Ala His Ser Pro					
	260		265		270
Leu Pro Ala Lys Tyr Ile Asp Leu Asp Lys Gly Phe Arg Lys Glu Asn					
	275		280		285
Cys Lys					
	290				

<210> 720

<211> 459

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (50)

<223> xaa equals any of the naturally occurring L-amino acids

<400> 720

Asp Ala His Pro Lys Pro Cys Cys Glu Thr Ser Ala Ala Ala Cys Arg
1 5 10 15

Leu Val Glu Arg Ile Leu Thr Ser Trp Glu Glu Asn Asp Arg Val Gln
20 25 30

Cys Ala Gly Gly Pro Arg Lys Gly Tyr Met Gly His Leu Thr Arg Val
35 40 45

Ala Xaa Ala Leu Val Gln Asn Thr Glu Lys Gly Pro Asn Ala Glu Gln
50 55 60

695

Leu	Arg	Gln	Leu	Leu	Lys	Glu	Leu	Pro	Ser	Glu	Gln	Gln	Glu	Gln	Trp	65	70	75	80
Glu	Ala	Phe	Val	Ser	Gly	Pro	Leu	Ala	Glu	Thr	Asn	Lys	Lys	Asn	Met	85	90	95	
Val	Asp	Leu	Val	Asn	Thr	His	His	Leu	His	Ser	Ser	Ser	Asp	Asp	Glu	100	105	110	
Asp	Asp	Arg	Leu	Lys	Glu	Phe	Asn	Phe	Pro	Glu	Glu	Ala	Val	Leu	Gln	115	120	125	
Gln	Ala	Phe	Met	Asp	Phe	Gln	Met	Gln	Arg	Met	Thr	Ser	Ala	Phe	Ile	130	135	140	
Asp	His	Phe	Gly	Phe	Asn	Asp	Glu	Glu	Phe	Gly	Glu	Gln	Glu	Glu	Ser	145	150	155	160
Val	Asn	Ala	Pro	Phe	Asp	Lys	Thr	Ala	Asn	Ile	Thr	Phe	Ser	Leu	Asn	165	170		175
Ala	Asp	Asp	Glu	Asn	Pro	Asn	Ala	Asn	Leu	Leu	Glu	Ile	Cys	Tyr	Lys	180	185		190
Asp	Arg	Ile	Gln	Gln	Phe	Asp	Asp	Asp	Glu	Glu	Glu	Glu	Asp	Glu	Glu	195	200		205
Glu	Ala	Gln	Gly	Ser	Gly	Glu	Ser	Asp	Gly	Glu	Asp	Gly	Ala	Trp	Gln	210	215		220
Gly	Ser	Gln	Leu	Ala	Arg	Gly	Ala	Arg	Leu	Gly	Gln	Pro	Pro	Gly	Val	225	230	235	240
Arg	Ser	Gly	Gly	Ser	Thr	Asp	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Asp	Glu	245	250		255
Glu	Glu	Glu	Glu	Asp	Glu	Glu	Gly	Ile	Gly	Cys	Ala	Ala	Arg	Gly	Gly	260	265		270
Ala	Thr	Pro	Leu	Ser	Tyr	Pro	Ser	Pro	Gly	Pro	Gln	Pro	Pro	Gly	Pro	275	280		285
Ser	Trp	Thr	Ala	Thr	Phe	Asp	Pro	Val	Pro	Thr	Asp	Ala	Pro	Thr	Ser	290	295	300	
Pro	Arg	Val	Ser	Gly	Glu	Glu	Glu	Leu	His	Thr	Gly	Pro	Pro	Ala	Pro	305	310	315	320
Gln	Gly	Pro	Leu	Ser	Val	Pro	Gln	Gly	Leu	Pro	Thr	Gln	Ser	Leu	Ala	325	330		335

696

Ser Pro Pro Ala Arg Asp Ala Leu Gln Leu Arg Ser Gln Asp Pro Thr
340 345 350

Pro Pro Ser Ala Pro Gln Glu Ala Thr Glu Gly Ser Lys Val Thr Glu
355 360 365

Pro Ser Ala Pro Cys Gln Ala Leu Val Ser Ile Gly Asp Leu Gln Ala
370 375 380

Thr Phe His Gly Ile Arg Ser Ala Pro Ser Ser Ser Asp Ser Ala Thr
385 390 395 400

Arg Asp Pro Ser Thr Ser Val Pro Ala Ser Gly Ala His Gln Pro Pro
405 410 415

Gln Thr Thr Glu Gly Glu Lys Ser Pro Glu Pro Leu Gly Leu Pro Gln
420 425 430

Ser Gln Ser Ala Gln Ala Leu Thr Pro Pro Pro Ile Pro Asn Gly Ser
435 440 445

Ala Pro Glu Gly Pro Ala Ser Pro Gly Ser Gln
450 455

<210> 721

<211> 523

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (115)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (194)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (327)

<223> Xaa equals any of the naturally occurring L-amino acids

697

<400> 721

Leu	Gln	Arg	Leu	Lys	Leu	Ile	Lys	Pro	Leu	Leu	Xaa	Phe	Glu	Ser	Leu
1				5					10					15	
Glu	Glu	Cys	Tyr	Met	Ala	Lys	Ile	Leu	Val	Ala	Glu	Gly	Thr	Arg	Asp
		20						25					30		
Val	Pro	Ile	Gly	Ala	Ile	Ile	Cys	Ile	Thr	Val	Gly	Lys	Pro	Glu	Asp
		35					40					45			
Ile	Glu	Ala	Phe	Lys	Asn	Tyr	Thr	Leu	Asp	Ser	Ser	Ala	Ala	Pro	Thr
	50					55					60				
Pro	Gln	Ala	Ala	Pro	Ala	Pro	Thr	Pro	Ala	Ala	Thr	Ala	Ser	Pro	Pro
65					70					75					80
Thr	Pro	Ser	Ala	Gln	Ala	Pro	Gly	Ser	Ser	Tyr	Pro	Pro	His	Met	Gln
				85					90					95	
Val	Leu	Leu	Pro	Ala	Leu	Ser	Pro	Thr	Met	Thr	Met	Gly	Thr	Val	Gln
			100					105					110		
Arg	Trp	Xaa	Lys	Lys	Val	Gly	Glu	Lys	Leu	Ser	Glu	Gly	Asp	Leu	Leu
	115						120					125			
Ala	Glu	Ile	Glu	Thr	Asp	Lys	Ala	Thr	Ile	Gly	Phe	Glu	Val	Gln	Glu
	130					135					140				
Glu	Gly	Tyr	Leu	Ala	Lys	Ile	Leu	Val	Pro	Glu	Gly	Thr	Arg	Asp	Val
145					150					155					160
Pro	Leu	Gly	Thr	Pro	Leu	Cys	Ile	Ile	Val	Glu	Lys	Glu	Ala	Asp	Ile
				165					170					175	
Ser	Ala	Phe	Ala	Asp	Tyr	Arg	Pro	Thr	Glu	Val	Thr	Asp	Leu	Lys	Pro
			180					185					190		
Gln	Xaa	Pro	Pro	Pro	Thr	Pro	Pro	Pro	Val	Ala	Ala	Val	Pro	Pro	Thr
		195					200					205			
Pro	Gln	Pro	Leu	Ala	Pro	Thr	Pro	Ser	Ala	Pro	Cys	Pro	Ala	Thr	Pro
	210					215					220				
Ala	Gly	Pro	Lys	Gly	Arg	Val	Phe	Val	Ser	Pro	Leu	Ala	Lys	Lys	Leu
225					230					235					240
Ala	Val	Glu	Lys	Gly	Ile	Asp	Leu	Thr	Gln	Val	Lys	Gly	Thr	Gly	Pro
				245					250					255	
Asp	Gly	Arg	Ile	Thr	Lys	Lys	Asp	Ile	Asp	Ser	Phe	Val	Pro	Ser	Lys
			260					265					270		

698

Val	Ala	Pro	Ala	Pro	Ala	Ala	Val	Val	Pro	Pro	Thr	Gly	Pro	Gly	Met	275	280	285
Ala	Pro	Val	Pro	Thr	Gly	Val	Phe	Thr	Asp	Ile	Pro	Ile	Ser	Asn	Ile	290	295	300
Arg	Arg	Val	Ile	Ala	Gln	Arg	Leu	Met	Gln	Ser	Lys	Gln	Thr	Ile	Pro	305	310	315
His	Tyr	Tyr	Leu	Ser	Ile	Xaa	Val	Asn	Met	Gly	Glu	Val	Leu	Leu	Val	325	330	335
Arg	Lys	Glu	Leu	Asn	Lys	Ile	Leu	Glu	Gly	Arg	Ser	Lys	Ile	Ser	Val	340	345	350
Asn	Asp	Phe	Ile	Ile	Lys	Ala	Ser	Ala	Leu	Ala	Cys	Leu	Lys	Val	Pro	355	360	365
Glu	Ala	Asn	Ser	Ser	Trp	Met	Asp	Thr	Val	Ile	Arg	Gln	Asn	His	Val	370	375	380
Val	Asp	Val	Ser	Val	Ala	Val	Ser	Thr	Pro	Ala	Gly	Leu	Ile	Thr	Pro	385	390	395
Ile	Val	Phe	Asn	Ala	His	Ile	Lys	Gly	Val	Glu	Thr	Ile	Ala	Asn	Asp	405	410	415
Val	Val	Ser	Leu	Ala	Thr	Lys	Ala	Arg	Glu	Gly	Lys	Leu	Gln	Pro	His	420	425	430
Glu	Phe	Gln	Gly	Gly	Thr	Phe	Thr	Ile	Ser	Asn	Leu	Gly	Met	Phe	Gly	435	440	445
Ile	Lys	Asn	Phe	Ser	Ala	Ile	Ile	Asn	Pro	Pro	Gln	Ala	Cys	Ile	Leu	450	455	460
Ala	Ile	Gly	Ala	Ser	Glu	Asp	Lys	Leu	Val	Pro	Ala	Asp	Asn	Glu	Lys	465	470	475
Gly	Phe	Asp	Val	Ala	Ser	Met	Met	Ser	Val	Thr	Leu	Ser	Cys	Asp	His	485	490	495
Arg	Val	Val	Asp	Gly	Ala	Val	Gly	Ala	Gln	Trp	Leu	Ala	Glu	Phe	Arg	500	505	510
Lys	Tyr	Leu	Glu	Lys	Pro	Ile	Thr	Met	Leu	Leu						515	520	

699

<210> 722

<211> 111

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (10)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 722

Ser	Ser	Arg	Ser	Arg	Ala	Ala	Asp	Glu	Xaa	Ala	Leu	Cys	Leu	Gln	Cys
1				5					10					15	

Asp	Met	Asn	Asp	Cys	Tyr	Ser	Arg	Leu	Arg	Arg	Leu	Val	Pro	Thr	Ile
			20					25					30		

Pro	Pro	Asn	Lys	Lys	Val	Ser	Lys	Val	Glu	Ile	Leu	Gln	His	Val	Ile
		35					40					45			

Asp	Tyr	Ile	Leu	Asp	Leu	Gln	Leu	Ala	Leu	Glu	Thr	His	Pro	Ala	Leu
	50					55					60				

Leu	Arg	Gln	Pro	Pro	Pro	Pro	Ala	Pro	Pro	His	His	Pro	Ala	Gly	Thr
65					70					75					80

Cys	Pro	Ala	Ala	Pro	Pro	Arg	Thr	Pro	Leu	Thr	Ala	Leu	Asn	Thr	Asp
				85					90					95	

Pro	Ala	Gly	Ala	Val	Asn	Lys	Gln	Gly	Asp	Ser	Ile	Leu	Cys	Arg	
		100						105					110		

<210> 723

<211> 190

<212> PRT

<213> Homo sapiens

<400> 723

Ser	Gly	Gly	Gly	Gly	Gly	Arg	Met	Ile	Lys	Leu	Phe	Ser	Leu	Lys	Gln
1					5				10					15	

Gln	Lys	Lys	Glu	Glu	Glu	Ser	Ala	Gly	Gly	Thr	Lys	Gly	Ser	Ser	Lys
			20					25					30		

Lys	Ala	Ser	Ala	Ala	Gln	Leu	Arg	Ile	Gln	Lys	Asp	Ile	Asn	Glu	Leu
		35					40				45				

Asn	Leu	Pro	Lys	Thr	Cys	Asp	Ile	Ser	Phe	Ser	Asp	Pro	Asp	Asp	Leu
	50					55					60				

700

Leu Asn Phe Lys Leu Val Ile Cys Pro Asp Glu Gly Phe Tyr Lys Ser
 65 70 75 80
 Gly Lys Phe Val Phe Ser Phe Lys Val Gly Gln Gly Tyr Pro His Asp
 85 90 95
 Pro Pro Lys Val Lys Cys Glu Thr Met Val Tyr His Pro Asn Ile Asp
 100 105 110
 Leu Glu Gly Asn Val Cys Leu Asn Ile Leu Arg Glu Asp Trp Lys Pro
 115 120 125
 Val Leu Thr Ile Asn Ser Ile Ile Tyr Gly Leu Gln Tyr Leu Phe Leu
 130 135 140
 Glu Pro Asn Pro Glu Asp Pro Leu Asn Lys Glu Ala Ala Glu Val Leu
 145 150 155 160
 Gln Asn Asn Arg Arg Leu Phe Glu Gln Asn Val Gln Arg Ser Met Arg
 165 170 175
 Gly Gly Tyr Ile Gly Ser Thr Tyr Phe Glu Arg Cys Leu Lys
 180 185 190

<210> 724

<211> 524

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (247)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (417)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (440)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (443)

<223> Xaa equals any of the naturally occurring L-amino acids

701

<400> 724

Arg	Arg	Arg	Arg	Ala	Asp	Arg	Ala	Thr	Pro	Arg	Glu	Val	Leu	Glu	Thr
1				5				10						15	
Pro	Gly	Ala	Ala	Ser	Val	Gln	Thr	Leu	Pro	Ser	Val	Thr	Met	Lys	Leu
		20						25					30		
Trp	Val	Ser	Ala	Leu	Leu	Met	Ala	Trp	Phe	Gly	Val	Leu	Ser	Cys	Val
		35					40					45			
Gln	Ala	Glu	Phe	Phe	Thr	Ser	Ile	Gly	His	Met	Thr	Asp	Leu	Ile	Tyr
	50					55					60				
Ala	Glu	Lys	Glu	Leu	Val	Gln	Ser	Leu	Lys	Glu	Tyr	Ile	Leu	Val	Glu
65					70					75					80
Glu	Ala	Lys	Leu	Ser	Lys	Ile	Lys	Ser	Trp	Ala	Asn	Lys	Met	Glu	Ala
				85					90					95	
Leu	Thr	Ser	Lys	Ser	Ala	Ala	Asp	Ala	Glu	Gly	Tyr	Leu	Ala	His	Pro
			100					105						110	
Val	Asn	Ala	Tyr	Lys	Leu	Val	Lys	Arg	Leu	Asn	Thr	Asp	Trp	Pro	Ala
	115						120					125			
Leu	Glu	Asp	Leu	Val	Leu	Gln	Asp	Ser	Ala	Ala	Gly	Phe	Ile	Ala	Asn
130						135					140				
Leu	Ser	Val	Gln	Arg	Gln	Phe	Phe	Pro	Thr	Asp	Glu	Asp	Glu	Ile	Gly
145					150					155					160
Ala	Ala	Lys	Ala	Leu	Met	Arg	Leu	Gln	Asp	Thr	Tyr	Arg	Leu	Asp	Pro
				165					170					175	
Gly	Thr	Ile	Ser	Arg	Gly	Glu	Leu	Pro	Gly	Thr	Lys	Tyr	Gln	Ala	Met
			180					185					190		
Leu	Ser	Val	Asp	Asp	Cys	Phe	Gly	Met	Gly	Arg	Ser	Ala	Tyr	Asn	Glu
		195					200					205			
Gly	Asp	Tyr	Tyr	His	Thr	Val	Leu	Trp	Met	Glu	Gln	Val	Leu	Lys	Gln
	210					215					220				
Leu	Asp	Ala	Gly	Glu	Glu	Ala	Thr	Thr	Thr	Lys	Ser	Gln	Val	Leu	Asp
225					230					235					240
Tyr	Leu	Ser	Tyr	Ala	Val	Xaa	Gln	Leu	Gly	Asp	Leu	His	Arg	Ala	Leu
				245					250					255	
Glu	Leu	Thr	Arg	Arg	Leu	Leu	Ser	Leu	Asp	Pro	Ser	His	Glu	Arg	Ala

702

260	265	270
Gly Gly Asn Leu Arg Tyr Phe	Glu Gln Leu Leu Glu Glu Glu Arg Glu	
275	280	285
Lys Thr Leu Thr Asn Gln Thr	Glu Ala Glu Leu Ala Thr Pro Glu Gly	
290	295	300
Ile Tyr Glu Arg Pro Val Asp Tyr	Leu Pro Glu Arg Asp Val Tyr Glu	
305	310	320
Ser Leu Cys Arg Gly Glu Gly Val	Lys Leu Thr Pro Arg Arg Gln Lys	
325	330	335
Arg Leu Phe Cys Arg Tyr His His	Gly Asn Arg Ala Pro Gln Leu Leu	
340	345	350
Ile Ala Pro Phe Lys Glu Glu Asp	Glu Trp Asp Ser Pro His Ile Val	
355	360	365
Arg Tyr Tyr Asp Val Met Ser Asp	Glu Glu Ile Glu Arg Ile Lys Glu	
370	375	380
Ile Ala Lys Pro Lys Leu Ala Arg	Ala Thr Val Arg Asp Pro Lys Thr	
385	390	400
Gly Val Leu Thr Val Ala Ser Tyr	Arg Val Ser Lys Ser Ser Trp Leu	
405	410	415
Xaa Glu Asp Asp Asp Pro Val Val	Ala Arg Val Asn Arg Arg Met Gln	
420	425	430
His Ile Thr Gly Leu Thr Val Xaa	Thr Ala Xaa Leu Leu Gln Val Ala	
435	440	445
Asn Tyr Gly Val Gly Gly Gln Tyr	Glu Pro His Phe Asp Phe Ser Arg	
450	455	460
Asn Asp Glu Arg Asp Thr Phe Lys	His Leu Gly Thr Gly Asn Arg Val	
465	470	480
Ala Thr Phe Leu Asn Tyr Met Ser	Asp Val Glu Ala Gly Gly Ala Thr	
485	490	495
Val Phe Pro Asp Leu Gly Ala Ala	Ile Trp Pro Lys Lys Gly Thr Ala	
500	505	510
Val Phe Trp Tyr Asn Leu Leu Arg	Ser Gly Arg Arg	
515	520	

703

<210> 725

<211> 92

<212> PRT

<213> Homo sapiens

<400> 725

Leu Lys Met Thr Ser Leu Phe Ala Gln Glu Ile Arg Leu Ser Lys Arg
1 5 10 15

His Glu Glu Ile Val Ser Gln Arg Leu Met Leu Leu Gln Gln Met Glu
20 25 30

Asn Lys Leu Gly Asp Gln His Thr Glu Lys Ala Ser Gln Leu Gln Thr
35 40 45

Val Glu Thr Ala Phe Lys Arg Asn Leu Ser Leu Leu Lys Asp Ile Glu
50 55 60

Ala Ala Glu Lys Ser Leu Gln Thr Arg Ile His Pro Leu Pro Arg Pro
65 70 75 80

Glu Val Val Ser Leu Glu Thr Arg Tyr Trp Ala Ser
85 90

<210> 726

<211> 690

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (108)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (123)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (383)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (688)

<223> Xaa equals any of the naturally occurring L-amino acids

$\langle 220 \rangle$

<221> SITE

$\langle 222 \rangle$ (690)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 726

Val 1	Ser	Arg	Ser	Pro 5	Arg	Val	Pro	Leu	Pro 10	Pro	Arg	Ser	Phe	Ser	Arg
Met	Ala	Gly	Asp 20	Ser	Thr	Ala	Thr	Ser	Arg 25	Arg	Leu	Gly	Ala 30	Ala	Pro
Asp	Arg	Ala 35	Ala	Pro	His	Ile	Leu 40	Pro	Ala	Gly	Ala 45	His	Arg	Ala	Ala
Thr	Ala 50	Pro	Gly	Leu	Gly	Gly 55	Gly	Pro	Glu	Pro	Leu 60	Gly	Arg	Ala	Leu
Ala 65	Gly	Gly	Leu	Arg	Gly 70	Pro	Gln	Gly	Asn	Gly 75	Trp	Leu	Gln	Glu	Arg 80
Lys	Arg	Arg	Cys 85	Pro	Gly	Leu	Ala	Gly	Cys 90	Phe	Glu	Ala	Ile	Ser 95	Cys
Gly	Thr	Gly	Leu 100	Gly	Leu	Pro	Gly	Leu 105	Ala	Leu	Xaa	Arg 110	Glu	Leu	Ile
Ser	Trp	Gly 115	Ala	Pro	Gly	Ser	Ala	Asp 120	Ser	Xaa	Arg	Leu 125	Leu	His	Trp
Gly 130	Ser	His	Pro	Thr	Ala	Phe 135	Val	Val	Ser	Tyr	Ala 140	Ala	Ala	Leu	Pro
Ala 145	Ala	Ala	Leu	Trp	His 150	Lys	Leu	Gly	Ser	Leu	Trp 155	Val	Pro	Gly	Gly 160
Gln	Gly	Gly	Ser 165	Gly	Asn	Pro	Val	Arg	Arg 170	Leu	Leu	Gly	Cys	Leu 175	Gly
Ser	Glu	Thr	Arg 180	Arg	Leu	Ser	Leu	Phe 185	Leu	Val	Leu	Val 190	Val	Leu	Ser
Ser	Leu	Gly 195	Glu	Met	Ala	Ile	Pro 200	Phe	Phe	Thr	Gly	Arg 205	Leu	Thr	Asp
Trp	Ile 210	Leu	Gln	Asp	Gly	Ser 215	Ala	Asp	Thr	Phe	Thr 220	Arg	Asn	Leu	Thr
Leu 225	Met	Ser	Ile	Leu	Thr 230	Ile	Ala	Ser	Ala	Val 235	Leu	Glu	Phe	Val	Gly 240

Asp	Gly	Ile	Tyr	Asn	Asn	Thr	Met	Gly	His	Val	His	Ser	His	Leu	Gln	245	250	255	
Gly	Glu	Val	Phe	Gly	Ala	Val	Leu	Arg	Gln	Glu	Thr	Glu	Phe	Phe	Gln	260	265	270	
Gln	Asn	Gln	Thr	Gly	Asn	Ile	Met	Ser	Arg	Val	Thr	Glu	Asp	Thr	Ser	275	280	285	
Thr	Leu	Ser	Asp	Ser	Leu	Ser	Glu	Asn	Leu	Ser	Leu	Phe	Leu	Trp	Tyr	290	295	300	
Leu	Val	Arg	Gly	Leu	Cys	Leu	Leu	Gly	Ile	Met	Leu	Trp	Gly	Ser	Val	305	310	315	320
Ser	Leu	Thr	Met	Val	Thr	Leu	Ile	Thr	Leu	Pro	Leu	Leu	Phe	Leu	Leu	325	330	335	
Pro	Lys	Lys	Val	Gly	Lys	Trp	Tyr	Gln	Leu	Leu	Glu	Val	Gln	Val	Arg	340	345	350	
Glu	Ser	Leu	Ala	Lys	Ser	Ser	Gln	Val	Ala	Ile	Glu	Ala	Leu	Ser	Ala	355	360	365	
Met	Pro	Thr	Val	Arg	Ser	Phe	Ala	Asn	Glu	Glu	Gly	Glu	Ala	Xaa	Lys	370	375	380	
Phe	Arg	Glu	Lys	Leu	Gln	Glu	Ile	Lys	Thr	Leu	Asn	Gln	Lys	Glu	Ala	385	390	395	400
Val	Ala	Tyr	Ala	Val	Asn	Ser	Trp	Thr	Thr	Ser	Ile	Ser	Gly	Met	Leu	405	410	415	
Leu	Lys	Val	Gly	Ile	Leu	Tyr	Ile	Gly	Gly	Gln	Leu	Val	Thr	Ser	Gly	420	425	430	
Ala	Val	Ser	Ser	Gly	Asn	Leu	Val	Thr	Phe	Val	Leu	Tyr	Gln	Met	Gln	435	440	445	
Phe	Thr	Gln	Ala	Val	Glu	Val	Leu	Leu	Ser	Ile	Tyr	Pro	Arg	Val	Gln	450	455	460	
Lys	Ala	Val	Gly	Ser	Ser	Glu	Lys	Ile	Phe	Glu	Tyr	Leu	Asp	Arg	Thr	465	470	475	480
Pro	Arg	Cys	Pro	Pro	Ser	Gly	Leu	Leu	Thr	Pro	Leu	His	Leu	Glu	Gly	485	490	495	
Leu	Val	Gln	Phe	Gln	Asp	Val	Ser	Phe	Ala	Tyr	Pro	Asn	Arg	Pro	Asp	500	505	510	

706

Val Leu Val Leu Gln Gly Leu Thr Phe Thr Leu Arg Pro Gly Glu Val
 515 520 525
 Thr Ala Leu Val Gly Pro Asn Gly Ser Gly Lys Ser Thr Val Ala Ala
 530 535 540
 Leu Leu Gln Asn Leu Tyr Gln Pro Thr Gly Gly Gln Leu Leu Leu Asp
 545 550 555 560
 Gly Lys Pro Leu Pro Gln Tyr Glu His Arg Tyr Leu His Arg Gln Val
 565 570 575
 Ala Ala Val Gly Gln Glu Pro Gln Val Phe Gly Arg Ser Leu Gln Glu
 580 585 590
 Asn Ile Ala Tyr Gly Leu Thr Gln Lys Pro Thr Met Glu Glu Ile Thr
 595 600 605
 Ala Ala Ala Val Lys Ser Gly Ala His Ser Phe Ile Ser Gly Leu Pro
 610 615 620
 Gln Gly Tyr Asp Thr Glu Val Asp Glu Ala Gly Ser Gln Leu Ser Gly
 625 630 635 640
 Gly Gln Arg Gln Ala Val Ala Leu Ala Arg Ala Leu Ile Arg Lys Pro
 645 650 655
 Cys Val Leu Ile Leu Asp Asp Ala Thr Ser Ala Leu Asp Ala Asn Ser
 660 665 670
 Gln Leu Gln Val Glu Gln Leu Leu Tyr Glu Ser Pro Glu Arg Tyr Xaa
 675 680 685
 Arg Xaa
 690

<210> 727

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (44)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

707

<222> (73)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 727

Thr	Pro	Pro	Leu	Val	Ser	Ser	Val	Ala	Ala	Leu	Asp	Ser	His	Arg	Ser
1				5					10					15	

Thr	Asn	Pro	Ile	Val	Asn	Ser	Ala	Cys	Lys	Gly	Ser	Arg	Leu	Cys	Ala
	20							25					30		

Pro	Tyr	Glu	Asn	Leu	Met	Pro	Asp	Asp	Leu	Arg	Xaa	Asn	Ser	Phe	Ile
	35						40					45			

Leu	Lys	Pro	Pro	Phe	Thr	Leu	Gln	Ser	Val	Glu	Lys	Leu	Ser	Ser	Thr
50						55					60				

Lys	Leu	Val	Pro	Gly	Ala	Lys	Asn	Xaa	Gly	Asp	Arg	Cys	Ser	Arg	Glu
65					70					75					80

Arg Ser

<210> 728

<211> 600

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (11)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (479)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (550)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (588)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

708

<222> (590)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 728

Ser	Arg	Val	Lys	Pro	Arg	Val	Arg	Gly	Thr	Xaa	Val	Arg	Thr	Pro	Gly
1				5					10					15	

Ser	Arg	Arg	Gly	Arg	His	Gly	Ala	Val	Pro	Gly	Asp	Trp	Glu	Ala	Ala
			20					25					30		

Ala	Gln	Ala	Arg	Gly	Ala	Gly	Gln	Arg	Leu	Pro	Thr	Pro	Ser	Glu	Ile
		35					40					45			

Leu	Ser	Asn	Ala	Gly	Leu	Arg	Phe	Glu	Val	Val	Pro	Ser	Lys	Phe	Lys
	50					55					60				

Glu	Lys	Leu	Asp	Lys	Ala	Ser	Phe	Ala	Thr	Pro	Tyr	Gly	Tyr	Ala	Met
65					70					75					80

Glu	Thr	Ala	Lys	Gln	Lys	Ala	Leu	Glu	Val	Ala	Asn	Arg	Leu	Tyr	Gln
				85					90					95	

Lys	Asp	Leu	Arg	Ala	Pro	Asp	Val	Val	Ile	Gly	Ala	Asp	Thr	Ile	Val
		100						105						110	

Thr	Val	Gly	Gly	Leu	Ile	Leu	Glu	Lys	Pro	Val	Asp	Lys	Gln	Asp	Ala
		115					120					125			

Tyr	Arg	Met	Leu	Ser	Arg	Leu	Ser	Gly	Arg	Glu	His	Ser	Val	Phe	Thr
	130					135					140				

Gly	Val	Ala	Ile	Val	His	Cys	Ser	Ser	Lys	Asp	His	Gln	Leu	Asp	Thr
145					150					155					160

Arg	Val	Ser	Glu	Phe	Tyr	Glu	Glu	Thr	Lys	Val	Lys	Phe	Ser	Glu	Leu
				165					170					175	

Ser	Glu	Glu	Leu	Leu	Trp	Glu	Tyr	Val	His	Ser	Gly	Glu	Pro	Met	Asp
			180					185					190		

Lys	Ala	Gly	Gly	Tyr	Gly	Ile	Gln	Ala	Leu	Gly	Gly	Met	Leu	Val	Glu
		195					200					205			

Ser	Val	His	Gly	Asp	Phe	Leu	Asn	Val	Val	Gly	Phe	Pro	Leu	Asn	His
	210					215					220				

Phe	Cys	Lys	Gln	Leu	Val	Lys	Leu	Tyr	Tyr	Pro	Pro	Arg	Pro	Glu	Asp
225					230					235				240	

Leu	Arg	Arg	Ser	Val	Lys	His	Asp	Ser	Ile	Pro	Ala	Ala	Asp	Thr	Phe
				245					250					255	

Glu	Asp	Leu	Ser	Asp	Val	Glu	Gly	Gly	Gly	Ser	Glu	Pro	Thr	Gln	Arg		
		260						265					270				
Asp	Ala	Gly	Ser	Arg	Asp	Glu	Lys	Ala	Glu	Ala	Gly	Glu	Ala	Gly	Gln		
		275					280					285					
Ala	Thr	Ala	Glu	Ala	Glu	Cys	His	Arg	Thr	Arg	Glu	Thr	Leu	Pro	Pro		
		290				295					300						
Phe	Pro	Thr	Arg	Leu	Leu	Glu	Leu	Ile	Glu	Gly	Phe	Met	Leu	Ser	Lys		
305					310					315					320		
Gly	Leu	Leu	Thr	Ala	Cys	Lys	Leu	Lys	Val	Phe	Asp	Leu	Leu	Lys	Asp		
				325					330					335			
Glu	Ala	Pro	Gln	Lys	Ala	Ala	Asp	Ile	Ala	Ser	Lys	Val	Asp	Ala	Ser		
		340						345					350				
Ala	Cys	Gly	Met	Glu	Arg	Leu	Leu	Asp	Ile	Cys	Ala	Ala	Met	Gly	Leu		
		355					360					365					
Leu	Glu	Lys	Thr	Glu	Gln	Gly	Tyr	Ser	Asn	Thr	Glu	Thr	Ala	Asn	Val		
	370					375					380						
Tyr	Leu	Ala	Ser	Asp	Gly	Glu	Tyr	Ser	Leu	His	Gly	Phe	Ile	Met	His		
385					390					395					400		
Asn	Asn	Asp	Leu	Thr	Trp	Asn	Leu	Phe	Thr	Tyr	Leu	Glu	Phe	Ala	Ile		
			405						410					415			
Arg	Glu	Gly	Thr	Asn	Gln	His	His	Arg	Ala	Leu	Gly	Lys	Lys	Ala	Glu		
			420					425					430				
Asp	Leu	Phe	Gln	Asp	Ala	Tyr	Tyr	Gln	Ser	Pro	Glu	Thr	Arg	Leu	Arg		
		435					440					445					
Phe	Met	Arg	Ala	Met	His	Gly	Met	Thr	Lys	Leu	Thr	Ala	Cys	Gln	Val		
	450					455					460						
Ala	Thr	Ala	Phe	Asn	Leu	Ser	Arg	Phe	Ser	Ser	Ala	Cys	Asp	Xaa	Gly		
465					470					475					480		
Gly	Cys	Thr	Gly	Ala	Leu	Ala	Arg	Glu	Leu	Ala	Arg	Glu	Tyr	Pro	Arg		
				485				490						495			
Met	Gln	Val	Thr	Val	Phe	Asp	Leu	Pro	Asp	Ile	Ile	Glu	Leu	Ala	Ala		
		500						505					510				
His	Phe	Gln	Pro	Pro	Gly	Pro	Gln	Gln	Cys	Arg	Ser	Thr	Ser	Gln	Gln		
		515					520					525					

710

Val Thr Phe Ser Gly Thr Pro Ser Pro Ala Leu Ser Cys Thr Ser Cys
 530 535 540

Ala Gly Ser Cys Met Xaa Gly Gln Thr Thr Lys Ser Thr Ser Tyr Ser
 545 550 555 560

Ala Gly Ser Pro Arg Ala Ala Ser Gln Gly Pro Ala Cys Cys Trp Trp
 565 570 575

Arg Arg Ser Trp Met Arg Arg Arg Gly Trp Arg Xaa Arg Xaa Asp Ala
 580 585 590

Val Thr Glu His Ala Gly Ala Asp
 595 600

<210> 729

<211> 535

<212> PRT

<213> Homo sapiens

<400> 729

Gly Arg Ser Ser Phe Thr Ser Leu Val Val Gly Val Phe Val Val Tyr
 1 5 10 15

Val Val His Thr Cys Trp Val Met Tyr Gly Ile Val Tyr Thr Arg Pro
 20 25 30

Cys Ser Gly Asp Ala Asn Cys Ile Gln Pro Tyr Leu Ala Arg Arg Pro
 35 40 45

Lys Leu Gln Leu Ser Val Tyr Thr Thr Thr Arg Ser His Leu Gly Ala
 50 55 60

Glu Asn Asn Ile Asp Leu Val Leu Asn Val Glu Asp Phe Asp Val Glu
 65 70 75 80

Ser Lys Phe Glu Arg Thr Val Asn Val Ser Val Pro Lys Lys Thr Arg
 85 90 95

Asn Asn Gly Thr Leu Tyr Ala Tyr Ile Phe Leu His His Ala Gly Val
 100 105 110

Leu Pro Trp His Asp Gly Lys Gln Val His Leu Val Ser Pro Leu Thr
 115 120 125

Thr Tyr Met Val Pro Lys Pro Glu Glu Ile Asn Leu Leu Thr Gly Glu
 130 135 140

Ser Asp Thr Gln Gln Ile Glu Ala Glu Lys Lys Pro Thr Ser Ala Leu
 145 150 155 160
 Asp Glu Pro Val Ser His Trp Arg Pro Arg Leu Ala Leu Asn Val Met
 165 170 175
 Ala Asp Asn Phe Val Phe Asp Gly Ser Ser Leu Pro Ala Asp Val His
 180 185 190
 Arg Tyr Met Lys Met Ile Gln Leu Gly Lys Thr Val His Tyr Leu Pro
 195 200 205
 Ile Leu Phe Ile Asp Gln Leu Ser Asn Arg Val Lys Asp Leu Met Val
 210 215 220
 Ile Asn Arg Ser Thr Thr Glu Leu Pro Leu Thr Val Ser Tyr Asp Lys
 225 230 235 240
 Val Ser Leu Gly Arg Leu Arg Phe Trp Ile His Met Gln Asp Ala Val
 245 250 255
 Tyr Ser Leu Gln Gln Phe Gly Phe Ser Glu Lys Asp Ala Asp Glu Val
 260 265 270
 Lys Gly Ile Phe Val Asp Thr Asn Leu Tyr Phe Leu Ala Leu Thr Phe
 275 280 285
 Phe Val Ala Ala Phe His Leu Leu Phe Asp Phe Leu Ala Phe Lys Asn
 290 295 300
 Asp Ile Ser Phe Trp Lys Lys Lys Lys Ser Met Ile Gly Met Ser Thr
 305 310 315 320
 Lys Ala Val Leu Trp Arg Cys Phe Ser Thr Val Val Ile Phe Leu Phe
 325 330 335
 Leu Leu Asp Glu Gln Thr Ser Leu Leu Val Leu Val Pro Ala Gly Val
 340 345 350
 Gly Ala Ala Ile Glu Leu Trp Lys Val Lys Lys Ala Leu Lys Met Thr
 355 360 365
 Ile Phe Trp Arg Gly Leu Met Pro Glu Phe Gln Phe Gly Thr Tyr Ser
 370 375 380
 Glu Ser Glu Arg Lys Thr Glu Glu Tyr Asp Thr Gln Ala Met Lys Tyr
 385 390 395 400
 Leu Ser Tyr Leu Leu Tyr Pro Leu Cys Val Gly Gly Ala Val Tyr Ser
 405 410 415

712

Leu Leu Asn Ile Lys Tyr Lys Ser Trp Tyr Ser Trp Leu Ile Asn Ser
 420 425 430

Phe Val Asn Gly Val Tyr Ala Phe Gly Phe Leu Phe Met Leu Pro Gln
 435 440 445

Leu Phe Val Asn Tyr Lys Leu Lys Ser Val Ala His Leu Pro Trp Lys
 450 455 460

Ala Phe Thr Tyr Lys Ala Phe Asn Thr Phe Ile Asp Asp Val Phe Ala
 465 470 475 480

Phe Ile Ile Thr Met Pro Thr Ser His Arg Leu Ala Cys Phe Arg Asp
 485 490 495

Asp Val Val Phe Leu Val Tyr Leu Tyr Gln Arg Trp Leu Tyr Pro Val
 500 505 510

Asp Lys Arg Arg Val Asn Glu Phe Gly Glu Ser Tyr Glu Glu Lys Ala
 515 520 525

Thr Arg Ala Pro His Thr Asp
 530 535

<210> 730

<211> 288

<212> PRT

<213> Homo sapiens

<400> 730

Arg Pro Ala Gly Val Thr Glu Leu Gln Pro Arg Ala Pro Gly Gly Gly
 1 5 10 15

Gly Met Glu Ala Ala Glu Pro Gly Asn Leu Ala Gly Val Arg His
 20 25 30

Ile Ile Leu Val Leu Ser Gly Lys Gly Gly Val Gly Lys Ser Thr Ile
 35 40 45

Ser Thr Glu Leu Ala Leu Ala Leu Arg His Ala Gly Lys Lys Val Gly
 50 55 60

Ile Leu Asp Val Asp Leu Cys Gly Pro Ser Ile Pro Arg Met Leu Gly
 65 70 75 80

Ala Gln Gly Arg Ala Val His Gln Cys Asp Arg Gly Trp Ala Pro Val
 85 90 95

Phe Leu Asp Arg Glu Gln Ser Ile Ser Leu Met Ser Val Gly Phe Leu

713

100	105	110
Leu Glu Lys Pro Asp Glu Ala Val Val Trp Arg Gly Pro Lys Lys Asn		
115	120	125
Ala Leu Ile Lys Gln Phe Val Ser Asp Val Ala Trp Gly Glu Leu Asp		
130	135	140
Tyr Leu Val Val Asp Thr Pro Pro Gly Thr Ser Asp Glu His Met Ala		
145	150	155
Thr Ile Glu Ala Leu Arg Pro Tyr Gln Pro Leu Gly Ala Leu Val Val		
165	170	175
Thr Thr Pro Gln Ala Val Ser Val Gly Asp Val Arg Arg Glu Leu Thr		
180	185	190
Phe Cys Arg Lys Thr Gly Leu Arg Val Met Gly Ile Val Glu Asn Met		
195	200	205
Ser Gly Phe Thr Cys Pro His Cys Thr Glu Cys Thr Ser Val Phe Ser		
210	215	220
Arg Gly Gly Gly Glu Glu Leu Ala Gln Leu Ala Gly Val Pro Phe Leu		
225	230	235
Gly Ser Val Pro Leu Asp Pro Ala Leu Met Arg Thr Leu Glu Glu Gly		
245	250	255
His Asp Phe Ile Gln Glu Phe Pro Gly Ser Pro Ala Phe Ala Ala Leu		
260	265	270
Thr Ser Ile Ala Gln Lys Ile Leu Asp Ala Thr Pro Ala Cys Leu Pro		
275	280	285

<210> 731

<211> 737

<212> PRT

<213> Homo sapiens

<400> 731

Asp Gln Leu Cys Gly Pro Gln Thr Tyr Lys Glu His Leu Glu Gly Gln
1 5 10 15

Lys His Lys Lys Lys Glu Ala Ala Leu Lys Ala Ser Gln Asn Thr Ser
20 25 30

714

Ser	Ser	Asn	Ser	Ser	Thr	Arg	Gly	Thr	Gln	Asn	Gln	Leu	Arg	Cys	Glu	35	40	45	
Leu	Cys	Asp	Val	Ser	Cys	Thr	Gly	Ala	Asp	Ala	Tyr	Ala	Ala	His	Ile	50	55	60	
Arg	Gly	Ala	Lys	His	Gln	Lys	Val	Val	Lys	Leu	His	Thr	Lys	Leu	Gly	65	70	75	80
Lys	Pro	Ile	Pro	Ser	Thr	Glu	Pro	Asn	Val	Val	Ser	Gln	Ala	Thr	Ser	85	90	95	
Ser	Thr	Ala	Val	Ser	Ala	Ser	Lys	Pro	Thr	Ala	Ser	Pro	Ser	Ser	Ile	100	105	110	
Ala	Ala	Asn	Asn	Cys	Thr	Val	Asn	Thr	Ser	Ser	Ile	Ala	Thr	Ser	Ser	115	120	125	
Met	Lys	Gly	Leu	Thr	Thr	Thr	Gly	Asn	Ser	Ser	Leu	Asn	Ser	Thr	Ser	130	135	140	
Asn	Thr	Lys	Val	Ser	Ala	Val	Pro	Thr	Asn	Met	Ala	Ala	Lys	Lys	Thr	145	150	155	160
Ser	Thr	Pro	Lys	Ile	Asn	Phe	Val	Gly	Gly	Asn	Lys	Leu	Gln	Ser	Thr	165	170	175	
Gly	Asn	Lys	Ala	Glu	Asp	Thr	Lys	Gly	Thr	Glu	Cys	Val	Lys	Ser	Thr	180	185	190	
Pro	Val	Thr	Ser	Ala	Val	Gln	Ile	Pro	Glu	Val	Lys	Gln	Asp	Thr	Val	195	200	205	
Ser	Glu	Pro	Val	Thr	Pro	Ala	Ser	Leu	Ala	Ala	Leu	Gln	Ser	Asp	Val	210	215	220	
Gln	Pro	Val	Gly	His	Asp	Tyr	Val	Glu	Glu	Val	Arg	Asn	Asp	Glu	Gly	225	230	235	240
Lys	Val	Ile	Arg	Phe	His	Cys	Lys	Leu	Cys	Glu	Cys	Ser	Phe	Asn	Asp	245	250	255	
Pro	Asn	Ala	Lys	Glu	Met	His	Leu	Lys	Gly	Arg	Arg	His	Arg	Leu	Gln	260	265	270	
Tyr	Lys	Lys	Lys	Val	Asn	Pro	Asp	Leu	Gln	Val	Glu	Val	Lys	Pro	Ser	275	280	285	
Ile	Arg	Ala	Arg	Lys	Ile	Gln	Glu	Glu	Lys	Met	Arg	Lys	Gln	Met	Gln	290	295	300	

715

Lys Glu Glu Tyr Trp Arg Arg Arg Glu Glu Glu Glu Arg Trp Arg Met
 305 310 315 320
 Glu Met Arg Arg Tyr Glu Glu Asp Met Tyr Trp Arg Arg Met Glu Glu
 325 330 335
 Glu Gln His His Trp Asp Asp Arg Arg Arg Met Pro Asp Gly Gly Tyr
 340 345 350
 Pro His Gly Pro Pro Gly Pro Leu Gly Leu Leu Gly Val Arg Pro Gly
 355 360 365
 Met Pro Pro Gln Pro Gln Gly Pro Ala Pro Leu Arg Arg Pro Asp Ser
 370 375 380
 Ser Asp Asp Arg Tyr Val Met Thr Lys His Ala Thr Ile Tyr Pro Thr
 385 390 395 400
 Glu Glu Glu Leu Gln Ala Val Gln Lys Ile Val Ser Ile Thr Glu Arg
 405 410 415
 Ala Leu Lys Leu Val Ser Asp Ser Leu Ser Glu His Glu Lys Asn Lys
 420 425 430
 Asn Lys Glu Gly Asp Asp Lys Lys Glu Gly Gly Lys Asp Arg Ala Leu
 435 440 445
 Lys Gly Val Leu Arg Val Gly Val Leu Ala Lys Gly Leu Leu Leu Arg
 450 455 460
 Gly Asp Arg Asn Val Asn Leu Val Leu Leu Cys Ser Glu Lys Pro Ser
 465 470 475 480
 Lys Thr Leu Leu Ser Arg Ile Ala Glu Asn Leu Pro Lys Gln Leu Ala
 485 490 495
 Val Ile Ser Pro Glu Lys Tyr Asp Ile Lys Cys Ala Val Ser Glu Ala
 500 505 510
 Ala Ile Ile Leu Asn Ser Cys Val Glu Pro Lys Met Gln Val Thr Ile
 515 520 525
 Thr Leu Thr Ser Pro Ile Ile Arg Glu Glu Asn Met Arg Glu Gly Asp
 530 535 540
 Val Thr Ser Gly Met Val Lys Asp Pro Pro Asp Val Leu Asp Arg Gln
 545 550 555 560
 Lys Cys Leu Asp Ala Leu Ala Ala Leu Arg His Ala Lys Trp Phe Gln
 565 570 575

716

Ala Arg Ala Asn Gly Leu Gln Ser Cys Val Ile Ile Ile Arg Ile Leu
 580 585 590
 Arg Asp Leu Cys Gln Arg Val Pro Thr Trp Ser Asp Phe Pro Ser Trp
 595 600 605
 Ala Met Glu Leu Leu Val Glu Lys Ala Ile Ser Ser Ala Ser Ser Pro
 610 615 620
 Gln Ser Pro Gly Asp Ala Leu Arg Arg Val Phe Glu Cys Ile Ser Ser
 625 630 635 640
 Gly Ile Ile Leu Lys Gly Ser Pro Gly Leu Leu Asp Pro Cys Glu Lys
 645 650 655
 Asp Pro Phe Asp Thr Leu Ala Thr Met Thr Asp Gln Gln Arg Glu Asp
 660 665 670
 Ile Thr Ser Ser Ala Gln Phe Ala Leu Arg Leu Leu Ala Phe Arg Gln
 675 680 685
 Ile His Lys Val Leu Gly Met Asp Pro Leu Pro Gln Met Ser Gln Arg
 690 695 700
 Phe Asn Ile His Asn Asn Arg Lys Arg Arg Arg Asp Ser Asp Gly Val
 705 710 715 720
 Asp Gly Phe Glu Ala Glu Gly Lys Lys Asp Lys Lys Asp Tyr Asp Asn
 725 730 735
 Phe

<210> 732

<211> 106

<212> PRT

<213> Homo sapiens

<400> 732

Gly Arg Gly Leu Asn Ser Pro Lys Glu Leu Arg Pro Leu Thr Arg Ala
 1 5 10 15
 Ala Pro Ala Ala Ala Ala Cys Thr Gly Pro Gly Ala Ala Met Pro Lys
 20 25 30
 Cys Pro Lys Cys Asn Lys Glu Val Tyr Phe Ala Glu Arg Val Thr Ser
 35 40 45

717

Leu Gly Lys Asp Trp His Arg Pro Cys Leu Lys Cys Glu Lys Cys Gly
 50 55 60
 Lys Thr Leu Thr Ser Gly Gly His Ala Glu His Glu Gly Lys Pro Tyr
 65 70 75 80
 Cys Asn His Pro Cys Tyr Ala Ala Met Phe Gly Pro Lys Gly Phe Gly
 85 90 95
 Arg Gly Gly Ala Glu Ser His Thr Phe Lys
 100 105

<210> 733

<211> 230

<212> PRT

<213> Homo sapiens

<400> 733

Ala Ser Cys Leu Gln Ser Val Ala Ser Ala Cys Ala Ser Phe Pro Ala
 1 5 10 15
 Pro Ser Trp Arg Gly Thr Arg Lys Arg Asn Ala Thr Asp Arg Val Thr
 20 25 30
 Gln Cys Lys Tyr Lys Arg Ile Gly Cys Pro Trp His Gly Pro Phe His
 35 40 45
 Glu Leu Thr Val His Glu Ala Ala Cys Ala His Pro Thr Lys Thr Gly
 50 55 60
 Ser Glu Leu Met Glu Ile Leu Asp Gly Met Asp Gln Ser His Arg Lys
 65 70 75 80
 Glu Met Gln Leu Tyr Asn Ser Ile Phe Ser Leu Leu Ser Phe Glu Lys
 85 90 95
 Ile Gly Tyr Thr Glu Val Gln Phe Arg Pro Tyr Arg Thr Asp Asp Phe
 100 105 110
 Ile Thr Arg Leu Tyr Tyr Glu Thr Pro Arg Phe Thr Val Leu Asn Gln
 115 120 125
 Thr Trp Val Leu Lys Ala Arg Val Asn Asp Ser Glu Arg Asn Pro Asn
 130 135 140
 Leu Ser Cys Lys Arg Thr Leu Ser Phe Gln Leu Leu Lys Ser Lys
 145 150 155 160
 Val Thr Ala Pro Leu Glu Cys Ser Phe Leu Leu Leu Lys Gly Pro Tyr

165							170						175			
Asp	Asp	Val	Arg	Ile	Ser	Pro	Val	Ile	Tyr	His	Phe	Val	Phe	Thr	Asn	
180							185						190			
Glu	Ser	Asn	Glu	Thr	Asp	Tyr	Val	Pro	Leu	Pro	Ile	Ile	Asp	Ser	Val	
195							200						205			
Glu	Cys	Asn	Lys	Leu	Leu	Ala	Ala	Lys	Asn	Ile	Asn	Leu	Arg	Leu	Phe	
210							215						220			
Leu	Phe	Gln	Ile	Gln	Lys											
225							230									

Ile Cys Ala Gln Val Leu Pro Tyr Leu Ser Gln Glu His Gln Gln Gln
115 120 125

719

Val Leu Gly Ala Ile Glu Arg Ala Lys Gln Val Thr Ala Pro Glu Leu
 130 135 140
 Asn Ser Ile Ile Arg Gln Gln Leu Gln Ala His Gln Leu Ser Gln Leu
 145 150 155 160
 Gln Ala Leu Ala Leu Pro Leu Thr Pro Leu Pro Val Gly Leu Gln Pro
 165 170 175
 Pro Ser Leu Pro Ala Val Ser Ala Gly Thr Gly Leu Leu Ser Leu Ser
 180 185 190
 Ala Leu Gly Ser Gln Ala His Leu Ser Lys Glu Asp Lys Asn Gly His
 195 200 205
 Asp Gly Asp Thr His Gln Glu Asp Asp Gly Glu Lys Ser Asp
 210 215 220

<210> 735
 <211> 248
 <212> PRT
 <213> Homo sapiens

<400> 735
 Gly Thr Ser Asp Met Glu Leu Phe Leu Ala Gly Arg Arg Val Leu Val
 1 5 10 15
 Thr Gly Ala Gly Lys Gly Ile Gly Arg Gly Thr Val Gln Ala Leu His
 20 25 30
 Ala Thr Gly Ala Arg Val Val Ala Val Ser Arg Thr Gln Ala Asp Leu
 35 40 45
 Asp Ser Leu Val Arg Glu Cys Pro Gly Ile Glu Pro Val Cys Val Asp
 50 55 60
 Leu Gly Asp Trp Glu Ala Thr Glu Arg Ala Leu Gly Ser Val Gly Pro
 65 70 75 80
 Val Asp Leu Leu Val Asn Asn Ala Ala Val Ala Leu Leu Gln Pro Phe
 85 90 95
 Leu Glu Val Thr Lys Glu Ala Phe Asp Arg Ser Phe Glu Val Asn Leu
 100 105 110
 Arg Ala Val Ile Gln Val Ser Gln Ile Val Ala Arg Gly Leu Ile Ala
 115 120 125
 Arg Gly Val Pro Gly Ala Ile Val Asn Val Ser Ser Gln Cys Ser Gln

720

130	135	140
Arg Ala Val Thr Asn His Ser Val Tyr Cys Ser Thr Lys Gly Ala Leu		
145	150	155 160
Asp Met Leu Thr Lys Val Met Ala Leu Glu Leu Gly Pro His Lys Ile		
	165	170 175
Arg Val Asn Ala Val Asn Pro Thr Val Val Met Thr Ser Met Gly Gln		
	180	185 190
Ala Thr Trp Ser Asp Pro His Lys Ala Lys Thr Met Leu Asn Arg Ile		
	195	200 205
Pro Leu Gly Lys Phe Ala Glu Val Glu His Val Val Asn Ala Ile Leu		
	210	215 220
Phe Leu Leu Ser Asp Arg Ser Gly Met Thr Thr Gly Ser Thr Leu Pro		
225	230	235 240
Val Glu Gly Gly Phe Trp Ala Cys		
	245	

<210> 736

<211> 216

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (61)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (68)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 736

Arg Leu Leu Phe Arg Val Arg Lys Arg Met Ile Ser Phe Ser Ala Pro
1 5 10 15
Pro Leu Met Leu Pro Phe Ser Phe Tyr Phe Phe Val Phe Pro Val Ala
20 25 30
Arg Thr Ala Arg Lys Arg Lys Pro Ser Pro Glu Pro Glu Gly Glu Val
35 40 45
Gly Pro Pro Lys Ile Asn Gly Glu Ala Gln Pro Trp Xaa Ser Thr Ser

721

50 55 60
 Thr Glu Gly Xaa Lys Ile Pro Met Thr Pro Thr Ser Ser Phe Val Ser
 65 70 75 80
 Pro Pro Pro Pro Thr Ala Ser Pro His Ser Asn Arg Thr Thr Pro Pro
 85 90 95
 Glu Ala Ala Gln Asn Gly Gln Ser Pro Met Ala Ala Leu Ile Leu Val
 100 105 110
 Ala Asp Asn Ala Gly Gly Ser His Ala Ser Lys Asp Ala Asn Gln Val
 115 120 125
 His Ser Thr Thr Arg Arg Asn Ser Asn Ser Pro Pro Ser Pro Ser Ser
 130 135 140
 Met Asn Gln Arg Arg Leu Gly Pro Arg Glu Val Gly Gly Gln Gly Ala
 145 150 155 160
 Gly Asn Thr Gly Gly Leu Glu Pro Val His Pro Ala Ser Leu Pro Asp
 165 170 175
 Phe Ser Leu Ala Thr Ser Ala Pro Leu Cys Cys Thr Leu Cys His Glu
 180 185 190
 Arg Leu Glu Asp Asn His Phe Val Gln Cys Arg Pro Ser Phe Asp Lys
 195 200 205
 Phe Ser Ser Leu Leu Arg Gln Arg
 210 215

<210> 737

<211> 317

<212> PRT

<213> Homo sapiens

<400> 737

Arg Pro Thr Arg Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Ser
 1 5 10 15
 Leu Glu Ser His Asn Phe Ser Leu Thr Ala Ser Pro Leu Thr Ser Leu
 20 25 30
 Pro Ile Pro Glu Val Met Met Thr Lys Tyr Ser Asn Leu Phe Leu Glu
 35 40 45
 Ser His Asn Ile Ser Leu Thr Glu His Ser Ser Val Pro Val Glu Lys
 50 55 60

722

Asn	Ile	Thr	Leu	Glu	Arg	Pro	Ser	Ala	Val	Glu	Leu	Thr	Cys	Gln	Phe	65	70	75	80
Thr	Thr	Ser	Gly	Asp	Val	Asn	Ser	Val	Asn	Val	Thr	Trp	Lys	Lys	Gly	85	90	95	
Asp	Glu	Gln	Leu	Lys	Asn	Tyr	His	Val	Ser	Ala	Thr	Glu	Gly	Ile	Leu	100	105	110	
Tyr	Thr	Gln	Tyr	Lys	Phe	Ser	Ile	Ile	Asn	Ser	Glu	Gln	Leu	Gly	Ser	115	120	125	
Tyr	Ser	Cys	Phe	Phe	Glu	Glu	Glu	Lys	Glu	Arg	Arg	Gly	Thr	Phe	Asn	130	135	140	
Phe	Gly	Val	Pro	Glu	Val	Gln	Arg	Lys	Asn	Lys	Pro	Leu	Ile	Thr	Tyr	145	150	155	160
Val	Gly	Asp	Ser	Val	Val	Leu	Val	Cys	Lys	Cys	Arg	His	Cys	Ala	Pro	165	170	175	
Leu	Asn	Trp	Thr	Trp	Tyr	Ser	Gly	Asn	Arg	Ser	Val	Gln	Val	Pro	Leu	180	185	190	
Asp	Val	His	Met	Asn	Glu	Lys	Tyr	Ala	Ile	Asn	Gly	Thr	Asn	Ala	Asn	195	200	205	
Glu	Thr	Arg	Leu	Lys	Ile	Met	Gln	Leu	Ser	Glu	Asp	Asp	Lys	Gly	Ser	210	215	220	
Tyr	Trp	Cys	His	Ala	Met	Phe	Gln	Leu	Gly	Glu	Ser	Gln	Glu	Ser	Val	225	230	235	240
Glu	Leu	Val	Val	Ile	Ser	Tyr	Leu	Val	Pro	Leu	Lys	Pro	Phe	Leu	Gly	245	250	255	
Ile	Val	Val	Glu	Val	Ile	Leu	Leu	Val	Ala	Ile	Ile	Leu	Phe	Cys	Glu	260	265	270	
Met	His	Thr	Gln	Lys	Lys	Lys	Met	His	Met	Asp	Asp	Gly	Lys	Glu	Phe	275	280	285	
Glu	Gln	Val	Glu	Gln	Leu	Lys	Ser	Asp	Asp	Ser	Asn	Gly	Ile	Glu	Asn	290	295	300	
Asn	Ala	Pro	Arg	His	Arg	Lys	Asn	Glu	Ala	Met	Ser	Gln				305	310	315	

723

<210> 738

<211> 67

<212> PRT

<213> Homo sapiens

<400> 738

Ala Arg Val Ala Ser Asp Pro Phe Phe Arg His Tyr Arg Gln Leu Asn
 1 5 10 15

Glu Lys Leu Val Gln Leu Ile Glu Asp Tyr Ser Leu Val Ser Phe Ile
 20 25 30

Pro Leu Asn Ile Gln Asp Lys Glu Ser Ile Gln Arg Val Leu Gln Ala
 35 40 45

Val Asp Lys Ala Asn Gly Tyr Cys Phe Gly Ala Gln Glu Gln Arg Thr
 50 55 60

Trp Lys Pro
 65

<210> 739

<211> 142

<212> PRT

<213> Homo sapiens

<400> 739

Ser Gln Gln Pro Arg Ile Met Ser Lys Leu Gly Arg Ala Ala Arg Gly
 1 5 10 15

Leu Arg Lys Pro Glu Val Gly Gly Val Ile Arg Ala Ile Val Arg Ala
 20 25 30

Gly Leu Ala Met Pro Gly Pro Pro Leu Gly Pro Val Leu Gly Gln Arg
 35 40 45

Gly Val Ser Ile Asn Gln Phe Cys Lys Glu Phe Asn Glu Arg Thr Lys
 50 55 60

Asp Ile Lys Glu Gly Ile Pro Leu Pro Thr Lys Ile Leu Val Lys Pro
 65 70 75 80

Asp Arg Thr Phe Glu Ile Lys Ile Gly Gln Pro Thr Val Ser Tyr Phe
 85 90 95

Leu Lys Ala Ala Ala Gly Ile Glu Lys Gly Ala Arg Gln Thr Gly Lys
 100 105 110

Glu Val Ala Gly Leu Val Thr Leu Lys His Val Tyr Glu Ile Ala Arg

724

115 120 125
 Ile Lys Ala Gln Asp Glu Ala Phe Ala Cys Arg Met Tyr Pro
 130 135 140

<210> 740
 <211> 485
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (12)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 740
 Trp Pro Ala Val Ala Val Arg Phe Thr Ala Leu Xaa Leu Gly Phe Gly
 1 5 10 15
 Asp Ala Val His Val Tyr Asp Gly Pro Gly Pro Pro Glu Ser Ser Arg
 20 25 30
 Leu Leu Arg Ser Leu Thr His Phe Ser Asn Gly Lys Ala Val Thr Val
 35 40 45
 Glu Thr Leu Ser Gly Gln Ala Val Val Ser Tyr His Thr Val Ala Trp
 50 55 60
 Ser Asn Gly Arg Gly Phe Asn Ala Thr Tyr His Val Arg Gly Tyr Cys
 65 70 75 80
 Leu Pro Trp Asp Arg Pro Cys Gly Leu Gly Ser Gly Leu Gly Ala Gly
 85 90 95
 Glu Gly Leu Gly Glu Arg Cys Tyr Ser Glu Ala Gln Arg Cys Asp Gly
 100 105 110
 Ser Trp Asp Cys Ala Asp Gly Thr Asp Glu Glu Asp Cys Pro Gly Cys
 115 120 125
 Pro Pro Gly His Phe Pro Cys Gly Ala Ala Gly Thr Ser Gly Ala Thr
 130 135 140
 Ala Cys Tyr Leu Pro Ala Asp Arg Cys Asn Tyr Gln Thr Phe Cys Ala
 145 150 155 160
 Asp Gly Ala Asp Glu Arg Arg Cys Arg His Cys Gln Pro Gly Asn Phe
 165 170 175

725

Arg	Cys	Arg	Asp	Glu	Lys	Cys	Val	Tyr	Glu	Thr	Trp	Val	Cys	Asp	Gly	180	185	190	
Gln	Pro	Asp	Cys	Ala	Asp	Gly	Ser	Asp	Glu	Trp	Asp	Cys	Ser	Tyr	Val	195	200	205	
Leu	Pro	Arg	Lys	Val	Ile	Thr	Ala	Ala	Val	Ile	Gly	Ser	Leu	Val	Cys	210	215	220	
Gly	Leu	Leu	Leu	Val	Ile	Ala	Leu	Gly	Cys	Thr	Cys	Lys	Leu	Tyr	Ala	225	230	235	240
Ile	Arg	Thr	Gln	Glu	Tyr	Ser	Ile	Phe	Ala	Pro	Leu	Ser	Arg	Met	Glu	245	250	255	
Ala	Glu	Ile	Val	Gln	Gln	Gln	Ala	Pro	Pro	Ser	Tyr	Gly	Gln	Leu	Ile	260	265	270	
Ala	Gln	Gly	Ala	Ile	Pro	Pro	Val	Glu	Asp	Phe	Pro	Thr	Glu	Asn	Pro	275	280	285	
Asn	Asp	Asn	Ser	Val	Leu	Gly	Asn	Leu	Arg	Ser	Leu	Leu	Gln	Ile	Leu	290	295	300	
Arg	Gln	Asp	Met	Thr	Pro	Gly	Gly	Gly	Pro	Gly	Ala	Arg	Arg	Arg	Gln	305	310	315	320
Arg	Gly	Arg	Leu	Met	Arg	Arg	Leu	Val	Arg	Arg	Leu	Arg	Arg	Trp	Gly	325	330	335	
Leu	Leu	Pro	Arg	Thr	Asn	Thr	Pro	Ala	Arg	Ala	Ser	Glu	Ala	Arg	Ser	340	345	350	
Gln	Val	Thr	Pro	Ser	Ala	Ala	Pro	Leu	Glu	Ala	Leu	Asp	Gly	Gly	Thr	355	360	365	
Gly	Pro	Ala	Arg	Glu	Gly	Gly	Ala	Val	Gly	Gly	Gln	Asp	Gly	Glu	Gln	370	375	380	
Ala	Pro	Pro	Leu	Pro	Ile	Lys	Ala	Pro	Leu	Pro	Ser	Ala	Ser	Thr	Ser	385	390	395	400
Pro	Ala	Pro	Thr	Thr	Val	Pro	Glu	Ala	Pro	Gly	Pro	Leu	Pro	Ser	Leu	405	410	415	
Pro	Leu	Glu	Pro	Ser	Leu	Leu	Ser	Gly	Val	Val	Gln	Ala	Leu	Arg	Gly	420	425	430	
Arg	Leu	Leu	Pro	Ser	Leu	Gly	Pro	Pro	Gly	Pro	Thr	Arg	Ser	Pro	Pro	435	440	445	

726

Gly Pro His Thr Ala Val Leu Ala Leu Glu Asp Glu Asp Asp Val Leu
 450 455 460

Leu Val Pro Leu Ala Glu Pro Gly Val Trp Val Ala Glu Ala Glu Asp
 465 470 475 480

Glu Pro Leu Leu Thr
 485

<210> 741
 <211> 313
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (7)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (9)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (36)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (276)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 741
 Gly Gly Ala Arg Gly Xaa Xaa Arg Xaa Val Ala Ser Phe Gln Gln Gln
 1 5 10 15

His Gly Ala Gln Arg Asp Leu Lys Leu Gly Ser Arg Leu Tyr Gly Pro
 20 25 30

Ser Ser Val Xaa Phe Ala Glu Asp Phe Val Arg Ser Ser Lys Gln His
 35 40 45

727

Tyr	Asn	Cys	Glu	His	Ser	Lys	Ile	Asn	Phe	Arg	Asp	Lys	Arg	Ser	Ala	50	55	60	
Leu	Gln	Ser	Ile	Asn	Glu	Trp	Ala	Ala	Gln	Thr	Thr	Asp	Gly	Lys	Leu	65	70	75	80
Pro	Glu	Val	Thr	Lys	Asp	Val	Glu	Arg	Thr	Asp	Gly	Ala	Leu	Leu	Val	85	90	95	
Asn	Ala	Met	Phe	Phe	Lys	Pro	His	Trp	Asp	Glu	Lys	Phe	His	His	Lys	100	105	110	
Met	Val	Asp	Asn	Arg	Gly	Phe	Met	Val	Thr	Arg	Ser	Tyr	Thr	Val	Gly	115	120	125	
Val	Thr	Met	Met	His	Arg	Thr	Gly	Leu	Tyr	Asn	Tyr	Tyr	Asp	Asp	Glu	130	135	140	
Lys	Glu	Lys	Leu	Gln	Met	Val	Glu	Met	Pro	Leu	Ala	His	Lys	Leu	Ser	145	150	155	160
Ser	Leu	Leu	Ile	Leu	Met	Pro	His	His	Val	Glu	Pro	Leu	Glu	Arg	Leu	165	170	175	
Glu	Lys	Leu	Leu	Thr	Lys	Glu	Gln	Leu	Lys	Ile	Trp	Met	Gly	Lys	Met	180	185	190	
Gln	Lys	Lys	Ala	Val	Ala	Ile	Ser	Leu	Pro	Lys	Gly	Val	Val	Glu	Val	195	200	205	
Thr	His	Asp	Leu	Gln	Lys	His	Leu	Ala	Gly	Leu	Gly	Leu	Thr	Glu	Ala	210	215	220	
Ile	Asp	Lys	Asn	Lys	Ala	Asp	Leu	Ser	Arg	Met	Ser	Gly	Lys	Lys	Asp	225	230	235	240
Leu	Tyr	Leu	Ala	Ser	Val	Phe	His	Ala	Thr	Ala	Phe	Glu	Trp	Asp	Thr	245	250	255	
Glu	Gly	Asn	Pro	Phe	Asp	Gln	Asp	Ile	Tyr	Gly	Arg	Glu	Glu	Leu	Arg	260	265	270	
Ser	Pro	Lys	Xaa	Phe	Tyr	Ala	Asp	His	Pro	Phe	Ile	Phe	Leu	Val	Arg	275	280	285	
Asp	Thr	Gln	Thr	Gly	Ser	Leu	Leu	Phe	Ile	Gly	Arg	Leu	Val	Arg	Pro	290	295	300	
Lys	Gly	Asp	Lys	Met	Arg	Asp	Glu	Leu								305	310		

728

<210> 742

<211> 60

<212> PRT

<213> Homo sapiens

<400> 742

Arg Asn Ile Lys Trp Glu Lys Ala Tyr Lys Ala Phe Arg Ile Leu Ser
 1 5 10 15

Val Ser Ser Phe Leu Val Phe Arg Cys Tyr Val Ile Lys His Ile Phe
 20 25 30

Phe Gly Phe Pro Arg Tyr Thr Ile Tyr Leu Phe Lys Gly Lys Ser Ile
 35 40 45

Lys Cys Ile Tyr Phe Ile Leu Trp Phe Cys Tyr Leu
 50 55 60

<210> 743

<211> 204

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 743

Pro Arg Gly Xaa Ser Gln Val Cys Pro Cys Ser Trp Asn Pro Gly Val
 1 5 10 15

Pro Glu Ala Lys Ala Pro Pro Arg Gly Ser Arg Glu Asp Leu Val Ala
 20 25 30

Glu Glu Ser Pro Glu Leu Leu Asn Pro Glu Pro Arg Arg Leu Ser Pro
 35 40 45

Glu Leu Arg Leu Leu Pro Tyr Met Ile Thr Leu Gly Asp Ala Val His
 50 55 60

Asn Phe Ala Asp Gly Leu Ala Val Gly Ala Ala Phe Ala Ser Ser Trp
 65 70 75 80

Lys Thr Gly Leu Ala Thr Ser Leu Ala Val Phe Cys His Glu Leu Pro
 85 90 95

729

His Glu Leu Gly Asp Phe Ala Ala Leu Leu His Ala Gly Leu Ser Val
 100 105 110
 Arg Gln Ala Leu Leu Leu Asn Leu Ala Ser Ala Leu Thr Ala Phe Ala
 115 120 125
 Gly Leu Tyr Val Ala Leu Ala Val Gly Val Ser Glu Glu Ser Glu Ala
 130 135 140
 Trp Ile Leu Ala Val Ala Thr Gly Leu Phe Leu Tyr Val Ala Leu Cys
 145 150 155 160
 Asp Met Leu Pro Ala Met Leu Lys Val Arg Asp Pro Arg Pro Trp Leu
 165 170 175
 Leu Phe Leu Leu His Asn Val Gly Leu Leu Gly Gly Trp Thr Val Leu
 180 185 190
 Leu Leu Leu Ser Leu Tyr Glu Asp Asp Ile Thr Phe
 195 200

<210> 744

<211> 81

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 744

Ile Thr Lys Gly Lys Xaa Val Ala Cys Ser Thr Gly Pro Glu Phe Pro
 1 5 10 15
 Gly Arg Pro Thr Arg Pro Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr
 20 25 30
 Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly Cys Glu
 35 40 45
 Lys Thr Thr Glu Gly Tyr Gly Cys Glu Lys Thr Thr Glu Gly Tyr Gly
 50 55 60
 Cys Glu Lys Thr Thr Glu Gly Thr Ala Ala Arg Arg Arg Gln Arg Val
 65 70 75 80

Arg

730

<210> 745

<211> 751

<212> PRT

<213> Homo sapiens

<400> 745

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Leu Pro Pro Leu Gly Ser Pro Gly Pro Ala Arg Ser Ala Gly Ser Cys
 1              5              10              15

Ser Val Leu Phe Ser Leu Ile Leu Gln Arg Gln Asp Pro Ala Pro Ala
      20              25              30

Leu Ser Thr Ala Thr Met Gly Lys Gly Val Gly Arg Asp Lys Tyr Glu
      35              40              45

Pro Ala Ala Val Ser Glu Gln Gly Asp Lys Lys Gly Lys Lys Gly Lys
      50              55              60

Lys Asp Arg Asp Met Asp Glu Leu Lys Lys Glu Val Ser Met Asp Asp
      65              70              75              80

His Lys Leu Ser Leu Asp Glu Leu His Arg Lys Tyr Gly Thr Asp Leu
      85              90              95

Ser Arg Gly Leu Thr Ser Ala Arg Ala Ala Glu Ile Leu Ala Arg Asp
      100              105              110

Gly Pro Asn Ala Leu Thr Pro Pro Pro Thr Thr Pro Glu Trp Ile Lys
      115              120              125

Phe Cys Arg Gln Leu Phe Gly Gly Phe Ser Met Leu Leu Trp Ile Gly
      130              135              140

Ala Ile Leu Cys Phe Leu Ala Tyr Ser Ile Gln Ala Ala Thr Glu Glu
      145              150              155              160

Glu Pro Gln Asn Asp Asn Leu Tyr Leu Gly Val Val Leu Ser Ala Val
      165              170              175

Val Ile Ile Thr Gly Cys Phe Ser Tyr Tyr Gln Glu Ala Lys Ser Ser
      180              185              190

Lys Ile Met Glu Ser Phe Lys Asn Met Val Pro Gln Gln Ala Leu Val
      195              200              205

Ile Arg Asn Gly Glu Lys Met Ser Ile Asn Ala Glu Glu Val Val Val
      210              215              220

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731

Gly	Asp	Leu	Val	Glu	Val	Lys	Gly	Gly	Asp	Arg	Ile	Pro	Ala	Asp	Leu		
225						230				235					240		
Arg	Ile	Ile	Ser	Ala	Asn	Gly	Cys	Lys	Val	Asp	Asn	Ser	Ser	Leu	Thr		
				245					250					255			
Gly	Glu	Ser	Glu	Pro	Gln	Thr	Arg	Ser	Pro	Asp	Phe	Thr	Asn	Glu	Asn		
			260					265					270				
Pro	Leu	Glu	Thr	Arg	Asn	Ile	Ala	Phe	Phe	Ser	Thr	Asn	Cys	Val	Glu		
		275					280					285					
Gly	Thr	Ala	Arg	Gly	Ile	Val	Val	Tyr	Thr	Gly	Asp	Arg	Thr	Val	Met		
	290					295					300						
Gly	Arg	Ile	Ala	Thr	Leu	Ala	Ser	Gly	Leu	Glu	Gly	Gly	Gln	Thr	Pro		
305					310					315					320		
Ile	Ala	Ala	Glu	Ile	Glu	His	Phe	Ile	His	Ile	Ile	Thr	Gly	Val	Ala		
			325						330					335			
Val	Phe	Leu	Gly	Val	Ser	Phe	Phe	Ile	Leu	Ser	Leu	Ile	Leu	Glu	Tyr		
			340					345					350				
Thr	Trp	Leu	Glu	Ala	Val	Ile	Phe	Leu	Ile	Gly	Ile	Ile	Val	Ala	Asn		
		355					360					365					
Val	Pro	Glu	Gly	Leu	Leu	Ala	Thr	Val	Thr	Val	Cys	Leu	Thr	Leu	Thr		
	370					375					380						
Ala	Lys	Arg	Met	Ala	Arg	Lys	Asn	Cys	Leu	Val	Lys	Asn	Leu	Glu	Ala		
385					390					395				400			
Val	Glu	Thr	Leu	Gly	Ser	Thr	Ser	Thr	Ile	Cys	Ser	Asp	Lys	Thr	Gly		
			405						410				415				
Thr	Leu	Thr	Gln	Asn	Arg	Met	Thr	Val	Ala	His	Met	Trp	Phe	Asp	Asn		
			420					425					430				
Gln	Ile	His	Glu	Ala	Asp	Thr	Thr	Glu	Asn	Gln	Ser	Gly	Val	Ser	Phe		
		435					440					445					
Asp	Lys	Thr	Ser	Ala	Thr	Trp	Leu	Ala	Leu	Ser	Arg	Ile	Ala	Gly	Leu		
	450					455					460						
Cys	Asn	Arg	Ala	Val	Phe	Gln	Ala	Asn	Gln	Glu	Asn	Leu	Pro	Ile	Leu		
465					470					475				480			
Lys	Arg	Ala	Val	Ala	Gly	Asp	Ala	Ser	Glu	Ser	Ala	Leu	Leu	Lys	Cys		
				485					490					495			

732

Ile Glu Leu Cys Cys Gly Ser Val Lys Glu Met Arg Glu Arg Tyr Ala
 500 505 510

Lys Ile Val Glu Ile Pro Phe Asn Ser Thr Asn Lys Tyr Gln Leu Ser
 515 520 525

Ile His Lys Asn Pro Asn Thr Ser Glu Pro Gln His Leu Leu Val Met
 530 535 540

Lys Gly Ala Pro Glu Arg Ile Leu Asp Arg Cys Ser Ser Ile Leu Leu
 545 550 555 560

His Gly Lys Glu Gln Pro Leu Asp Glu Glu Leu Lys Asp Ala Phe Gln
 565 570 575

Asn Ala Tyr Leu Glu Leu Gly Gly Leu Gly Glu Arg Val Leu Gly Phe
 580 585 590

Cys His Leu Phe Leu Pro Asp Glu Gln Phe Pro Glu Gly Phe Gln Phe
 595 600 605

Asp Thr Asp Asp Val Asn Phe Pro Ile Asp Asn Leu Cys Phe Val Gly
 610 615 620

Leu Ile Ser Met Ile Asp Pro Pro Arg Ala Ala Val Pro Asp Ala Val
 625 630 635 640

Gly Lys Cys Arg Ser Ala Gly Ile Lys Val Ile Met Val Thr Gly Asp
 645 650 655

His Pro Ile Thr Ala Lys Ala Ile Ala Lys Gly Val Gly Ile Ile Ser
 660 665 670

Glu Gly Asn Glu Thr Val Glu Asp Ile Ala Ala Arg Leu Asn Ile Pro
 675 680 685

Val Ser Gln Val Asn Pro Arg Asp Ala Lys Ala Cys Val Val His Gly
 690 695 700

Ser Asp Leu Lys Asp Met Thr Ser Glu Gln Leu Asp Asp Ile Leu Lys
 705 710 715 720

Tyr His Thr Glu Ile Val Phe Ala Lys Thr Ser Pro Gln Gln Lys Leu
 725 730 735

Ile Ile Val Glu Arg Leu Pro Lys Thr Gly Cys Tyr Arg Gly Leu
 740 745 750

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733

<211> 25
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<400> 746
Ile Pro Ala Leu Trp Xaa Ala Xaa Val Gly Arg Ser Leu Glu Pro Arg
1 5 10 15
Ser Leu Arg Ser Ala Trp Ala Thr Trp
20 25

<210> 747
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<400> 747
Xaa Xaa Leu Gly Gly Arg Val Cys Ser Glu Pro Arg Trp Arg His Cys
1 5 10 15
Thr Pro Ala Trp Gly Thr Glu Arg Asp Ser Ile Ser Lys Lys Lys Lys
20 25 30
Lys Lys Ile Lys Asn
35

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734

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<400> 748
Asn Xaa Ala Leu Arg Asp Asp Val Ala Ala Gly Arg Arg Arg Leu His
1 5 10 15
Ile Lys Ala Val Cys Gln Ser Val Arg Glu Ala Thr Thr Ala Ser Gly
20 25 30
Gly Met Asn Ala Ala Ser Pro Arg Leu Xaa Arg His Arg Xaa Asn Gly
35 40 45
Xaa Tyr Phe Thr Leu Arg Glu Arg Leu Ile Thr Met Gln Lys Gln Leu
50 55 60
Gly Gly Asn Pro Glu Val Tyr
65 70

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736

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<400> 749

Gly	Ile	Ser	Arg	Lys	Met	Lys	Ser	Ser	Leu	Pro	Gln	Gly	Val	Arg	Asn
1				5					10					15	

Val	Ala	Xaa	Val	Cys	Leu	Gln	Ile	Gly	Tyr	Pro	Thr	Val	Ala	Ser	Val
			20					25					30		

Pro	His	Ser	Ile	Ile	Asn	Gly	Tyr	Xaa	Arg	Xaa	Leu	Ala	Leu	Ser	Val
		35					40					45			

Glu	Thr	Asp	Tyr	Thr	Phe	Pro	Leu	Ala	Glu	Xaa	Val	Xaa	Ala	Ser	Trp
	50						55				60				

Leu	Ile	His	Leu	Pro	Xaa	Trp	Leu	Leu	Pro	Xaa	Trp	Leu	Leu	Pro	Pro
65					70					75					80

Gln	Leu	Leu	Leu	Leu	Leu	Leu	Xaa	Pro	Xaa	Leu	Ser	Xaa	Asn	Pro	Arg
				85					90					95	

Lys	Ser	Glu	Asp	Pro	Xaa	Lys	Xaa	Trp	Ile	Gly	Ser	Leu
			100					105				

<210> 750

<211> 105

<212> PRT

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<400> 750

Gly	Thr	Xaa	Gly	Pro	Ala	Ser	Gly	Val	Ala	Gly	Thr	Met	Gln	Arg	Xaa
1				5					10					15	

Ser	Leu	Pro	Phe	Ala	Ile	Leu	Thr	Leu	Val	Asn	Ala	Pro	Tyr	Lys	Arg
			20					25					30		

737

Gly Phe Tyr Cys Gly Asp Asp Ser Ile Arg Tyr Pro Tyr Arg Pro Asp
35 40 45

Thr Ile Thr His Gly Leu Met Ala Gly Val Thr Ile Thr Ala Thr Val
50 55 60

Ile Leu Val Ser Ala Gly Glu Ala Tyr Leu Val Tyr Thr Asp Arg Leu
65 70 75 80

Tyr Ser Arg Ser Asp Phe Asn Asn Tyr Val Ala Ala Val Tyr Lys Val
85 90 95

Leu Gly Thr Ser Cys Leu Gly Leu Pro
100 105

<210> 751

<211> 61

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738

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<400> 751

Xaa	Ser	Arg	Lys	Pro	Arg	Xaa	Xaa	Val	Thr	Asp	Tyr	Ile	Lys	Val	Tyr
1				5					10					15	

Tyr	Thr	Leu	Arg	Lys	Gln	Met	Asn	Xaa	Asn	Leu	Phe	Ser	Ser	Phe	Ile
			20					25					30		

Thr	Pro	Thr	Ile	Ile	Gly	Leu	Pro	Ile	Val	Ile	Ile	Xaa	Thr	Met	Phe
			35				40					45			

Pro	Ser	Ile	Asp	Xaa	Pro	Ile	Thr	Tyr	Pro	Xaa	Xaa	Gln
	50					55						60

<210> 752

<211> 58

<212> PRT

<213> Homo sapiens

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 752

Ser	Asp	Pro	Glu	Ala	Glu	Val	Glu	Glu	Ser	Ser	Ser	Gly	Leu	Arg	Leu
1				5					10					15	

Ser	Leu	Ile	Lys	Met	Thr	Thr	Ser	Gln	Lys	His	Arg	Asp	Phe	Val	Ala
			20					25					30		

Xaa	Pro	Met	Gly	Glu	Asn	Gln	Trp	Gly	Thr	Trp	Leu	Gly	Leu	Val	Xaa
			35				40					45			

739

Ser Trp Ala Arg Asn Trp Lys Lys Gly Phe
 50 55

<210> 753

<211> 73

<212> PRT

<213> Homo sapiens

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<222> (71)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 753

Thr Leu His Ser Lys Gly Asn Lys Ser Trp Ser Ser Thr Ala Val Thr
 1 5 10 15

Ala Ala Leu Glu Leu Val Gly Gly Pro Val Pro Asn Ser Pro Tyr Ser
 20 25 30

Glu Ser Tyr Tyr Asn Ser Leu Ala Val Val Leu Gln Arg Arg Asp Xaa
 35 40 45

Glu Asn Xaa Xaa Xaa Phe Arg Leu Val Cys Cys Val Glu Leu Xaa Ala

740

50

55

60

Asp Asn Asn Ser His Arg Xaa Gln Leu
65 70

<210> 754

<211> 116

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<213> Homo sapiens

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<221> SITE

<222> (43)

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<222> (62)

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<400> 754
Met Gly Ser Asp Tyr Ile Arg Glu Val Asn Val Val Lys Ser Ala Arg
1 5 10 15
Xaa Gly Tyr Ser Lys Met Leu Leu Gly Val Tyr Ala Tyr Phe Ile Glu

742

	20		25		30										
His	Lys	Gln	Arg	Asn	Thr	Leu	Ile	Trp	Leu	Xaa	Thr	Asp	Gly	Asp	Ala
	35					40					45				
Arg	Glu	Leu	Tyr	Glu	Lys	Pro	Thr	Leu	Ser	Pro	Thr	Ile	Xaa	Asp	Ile
	50					55					60				
Pro	Ser	Xaa	Xaa	Gly	Ala	Gly	Pro	Val	Val	Trp	Gln	Lys	Ser	Thr	Gly
	65				70					75					80
Xaa	Asn	Lys	Xaa	Asn	His	Xaa	Xaa	Val	Ser	Xaa	Xaa	Trp	Gly	Gly	Pro
				85					90					95	
Arg	Asn	Pro	Ile	Xaa	Pro	Ile	Ser	Xaa	Trp	Xaa	Phe	Xaa	Asn	Ser	Xaa
		100						105					110		
Gly	Pro	Xaa	Phe												
	115														

<210> 755

<211> 148

<212> PRT

<213> Homo sapiens

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<220>

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<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

743

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 755

Ile	Arg	Gln	Xaa	Ile	Asp	Ile	Arg	Lys	Asp	Leu	Tyr	Ala	Asn	Asn	Val
1				5					10					15	

Leu	Ser	Gly	Gly	Thr	Thr	Met	Tyr	Pro	Gly	Ile	Ala	Asp	Arg	Met	Gln
			20					25					30		

Lys	Glu	Ile	Thr	Ala	Leu	Ala	Pro	Ser	Thr	Met	Lys	Ile	Lys	Ile	Ile
		35					40					45			

Ala	Pro	Pro	Glu	Ala	Gln	Ile	Leu	Cys	Leu	Asp	Arg	Trp	Leu	His	Pro
	50					55					60				

Gly	Leu	Ser	Val	His	Leu	Pro	Ala	Asp	Val	Asp	Gln	Gln	Thr	Gly	Asn
65					70					75					80

Thr	Val	Lys	Pro	Gly	Leu	Pro	Leu	Ser	Thr	Ala	Asn	Ala	Phe	Leu	Lys
				85					90					95	

His	Phe	Ser	Trp	Phe	Leu	Phe	Cys	Leu	Leu	Gly	Thr	Gln	Leu	Trp	Asn
			100					105					110		

Val	Pro	Val	Gly	Ile	Tyr	Gly	Xaa	Phe	Ser	Phe	Phe	Phe	Gln	Ile	Ile
		115					120					125			

Pro	Arg	Ala	Lys	Val	Leu	Xaa	Trp	Xaa	Xaa	His	Gly	Val	Phe	Leu	Asn
	130					135					140				

Lys	Xaa	Trp	Lys
145			

<210> 756

<211> 151

<212> PRT

<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 756

Ala	Glu	Leu	Ala	Thr	Thr	Ser	Thr	Met	Pro	Tyr	Gln	Tyr	Pro	Ala	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

744

1	5	10	15												
Thr	Pro	Glu	Gln	Lys	Lys	Glu	Leu	Ser	Asp	Ile	Ala	His	Arg	Ile	Val
			20					25					30		
Ala	Pro	Gly	Lys	Gly	Ile	Leu	Ala	Ala	Asp	Glu	Ser	Thr	Gly	Ser	Ile
		35					40					45			
Ala	Lys	Arg	Leu	Gln	Ser	Ile	Gly	Thr	Glu	Asn	Thr	Glu	Glu	Asn	Arg
	50					55					60				
Arg	Phe	Tyr	Arg	Gln	Leu	Leu	Leu	Thr	Ala	Asp	Asp	Arg	Val	Asn	Pro
65					70					75					80
Cys	Ile	Gly	Gly	Val	Ile	Leu	Phe	His	Glu	Thr	Leu	Tyr	Gln	Lys	Ala
				85					90					95	
Asp	Asp	Gly	Arg	Pro	Phe	Pro	Gln	Val	Ile	Lys	Ser	Lys	Gly	Gly	Val
			100					105					110		
Val	Gly	Ile	Lys	Val	Asp	Lys	Gly	Val	Val	Pro	Leu	Ala	Gly	Thr	Asn
		115					120					125			
Gly	Glu	Thr	Thr	Thr	Gln	Gly	Leu	Asp	Gly	Leu	Ser	Glu	Arg	Cys	Ala
	130					135					140				
Gln	Tyr	Xaa	Glu	Gly	Arg	Ser									
145					150										

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<211> 94

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745

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 757

Phe Val Thr Ile Leu Ser Ile Ile Ile Thr Leu Phe Phe Ile Phe Gln
1 5 10 15

Leu Lys Val Ser Xaa Tyr Ser Phe Pro Glu Asn Pro Glu Pro Lys Ser
20 25 30

Leu Thr Thr Ser Lys Ser Thr Thr Pro Trp Arg Xaa Gln Met Asn Xaa
35 40 45

Asn Leu Phe Ser Ser Phe Ile Thr Pro Thr Ile Ile Gly Leu Pro Ile
50 55 60

Val Ile Ile Ile Thr Met Phe Pro Ser Ile Ile Phe Pro Ser Pro Thr
65 70 75 80

Arg Leu Ile Asn Asn Arg Leu Ile Ser Ile Xaa Thr Met Asp
85 90

<210> 758

<211> 115

<212> PRT

<213> Homo sapiens

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

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746

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 Arg Xaa Ala Leu Xaa Arg Leu Thr Ile Gly Xaa Ser Trp Tyr Ala Cys
 1 5 10 15
 Arg Tyr Arg Ser Gly Ile Pro Gly Ser Thr His Ala Ser Xaa Arg Arg
 20 25 30
 Gly Gln Leu Arg Ala Arg Gly Gly Gly Ala Xaa Pro Arg Gly Ala Met
 35 40 45
 Xaa Asp Xaa Arg Ala Gly Ser Pro Arg Xaa Gly Pro Ala Ala Arg Asp
 50 55 60
 Val Ala Ala Met Ala Ser Pro Gln Leu Cys Arg Ala Leu Val Ser Ala
 65 70 75 80

747

Gln Trp Val Ala Glu Ala Leu Arg Ala Pro Arg Ala Gly Ala Ala Ser
 85 90 95

Ala Ala Xaa Arg Thr Pro Pro Gly Xaa Leu Ala Gly Ser Trp Gly Ala
 100 105 110

Arg Thr Xaa
 115

<210> 759
 <211> 44
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (3)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (17)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (42)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 759
 Ile Ala Xaa Gly Arg Ser Arg Gly Ser Lys Leu Thr Trp Thr Cys Met
 1 5 10 15

Xaa Arg His Ser Ser Ser Ile Val Ser Pro Lys Phe Asn Ser Leu Ala
 20 25 30

Val Val Leu Gln Arg Arg Asp Trp Glu Xaa Xaa Lys
 35 40

<210> 760
 <211> 94
 <212> PRT

748

<213> Homo sapiens

<220>

<221> SITE

<222> (80)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (91)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 760

Asn	Asp	Leu	Val	Glu	Tyr	Ser	Pro	Val	Thr	Glu	Lys	His	Leu	Thr	Asp
1				5					10					15	

Gly	Met	Thr	Val	Arg	Glu	Leu	Cys	Ser	Ala	Ala	Ile	Thr	Met	Ser	Asp
			20				25						30		

Asn	Thr	Ala	Ala	Asn	Leu	Leu	Leu	Thr	Thr	Ile	Gly	Gly	Pro	Lys	Glu
		35				40						45			

Leu	Thr	Ala	Phe	Leu	His	Asn	Met	Gly	Asp	His	Val	Thr	Arg	Leu	Asp
	50					55					60				

Arg	Trp	Glu	Pro	Glu	Leu	Asn	Glu	Ala	Ile	Pro	Asn	Asp	Glu	Arg	Xaa
65					70					75					80

Thr	Thr	Met	Pro	Val	Ala	Met	Ala	Thr	Thr	Xaa	Ala	Asn	Tyr
				85					90				

<210> 761

<211> 38

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (9)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

749

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 761

Leu Gln Glu Ile Asn Arg Val Tyr Xaa Glu Met Tyr Lys Thr Asp Leu
 1 5 10 15

Glu Lys Asp Ile Xaa Ser Asp Xaa Ser Gly Asp Phe Arg Lys Leu Met
 20 25 30

Val Ala Leu Ala Lys Gly
 35

<210> 762

<211> 192

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 762

Cys Lys Xaa Xaa Leu Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro
 1 5 10 15

Pro Arg Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu
 20 25 30

Phe Gly Thr Ser Cys Val Gly Leu Arg Glu Ala Val Arg Ala Gly Ala
 35 40 45

Val Gly Arg Gly Ala Glu Ala Leu Ala Arg Gly Met Ala His Cys Val
 50 55 60

Thr Leu Val Gln Leu Ser Ile Ser Cys Asp His Leu Ile Asp Lys Asp
 65 70 75 80

Ile Gly Ser Lys Ser Asp Pro Leu Cys Val Leu Leu Gln Asp Val Gly
 85 90 95

Gly Gly Ser Trp Ala Glu Leu Gly Arg Thr Glu Arg Val Arg Asn Cys
 100 105 110

750

Ser Ser Pro Glu Phe Ser Lys Thr Leu Gln Leu Glu Tyr Arg Phe Glu
 115 120 125

Thr Val Gln Lys Leu Arg Phe Gly Ile Tyr Asp Ile Asp Asn Lys Thr
 130 135 140

Pro Glu Leu Arg Asp Asp Asp Phe Leu Gly Gly Ala Glu Cys Ser Leu
 145 150 155 160

Gly Gln Ile Val Ser Ser Gln Val Leu Thr Leu Pro Leu Met Leu Lys
 165 170 175

Leu Glu Asn Leu Leu Gly Gly Gly Pro Ser Arg Ser Gln Leu Arg Asn
 180 185 190

<210> 763

<211> 103

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (96)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 763

Ser Phe Tyr Ser Ile Pro Glu Phe Asp Glu Trp Lys Lys His Ile Glu
 1 5 10 15

Asn Gln Lys Ala Trp Lys Ile Lys Tyr Tyr Lys Gly Leu Gly Thr Ser
 20 25 30

Thr Ala Lys Glu Ala Lys Glu Tyr Phe Ala Asp Met Glu Arg His Arg
 35 40 45

Ile Leu Phe Arg Tyr Ala Gly Pro Glu Asp Asp Ala Ala Ile Thr Leu
 50 55 60

Ala Phe Ser Lys Lys Lys Ile Asp Asp Arg Lys Glu Trp Leu Thr Asn
 65 70 75 80

Phe Met Glu Asp Arg Arg Gln Arg Ser Tyr Met Ala Tyr Gln Arg Xaa
 85 90 95

Asp Ser Leu Ser Thr Gln Thr
 100

751

<210> 764
 <211> 105
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (101)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 764
 Val Phe Ser Pro Thr Gly Ser Asp Gly Pro Leu Ala Thr Ser Lys Pro
 1 5 10 15
 Val Pro Ala Glu Lys Ser Gly Leu Pro Val Gly Pro Glu Asn Gly Val
 20 25 30
 Glu Leu Ser Lys Glu Glu Leu Ile Arg Arg Lys Arg Glu Glu Phe Ile
 35 40 45
 Gln Lys His Gly Arg Gly Met Glu Lys Ser Asn Lys Ser Thr Lys Ser
 50 55 60
 Asp Ala Pro Lys Glu Lys Gly Lys Lys Ala Pro Arg Val Trp Glu Leu
 65 70 75 80
 Gly Gly Cys Ala Asn Lys Glu Met Leu Asp Tyr Ser Thr Ser Thr Thr
 85 90 95
 Asn Gly Thr Pro Xaa Ala Cys Leu Val
 100 105

<210> 765
 <211> 147
 <212> PRT
 <213> Homo sapiens

<400> 765
 Gly Arg Glu Thr Met Phe Arg Ala Ala Ala Pro Gly Gln Leu Arg Arg
 1 5 10 15
 Ala Ala Ser Leu Leu Arg Phe Gln Ser Thr Leu Val Ile Ala Glu His
 20 25 30
 Ala Asn Asp Ser Leu Ala Pro Ile Thr Leu Asn Thr Ile Thr Ala Ala
 35 40 45

752

Thr Arg Leu Gly Gly Glu Val Ser Cys Leu Val Ala Gly Thr Lys Cys
 50 55 60
 Asp Lys Val Ala Gln Asp Leu Cys Lys Val Ala Gly Ile Ala Lys Val
 65 70 75 80
 Leu Val Ala Gln His Asp Val Tyr Lys Gly Leu Leu Pro Glu Glu Leu
 85 90 95
 Thr Pro Leu Ile Leu Ala Thr Gln Lys Gln Phe Asn Tyr Thr His Ile
 100 105 110
 Cys Ala Gly Ala Ser Ala Phe Gly Lys Asn Leu Leu Pro Arg Val Ala
 115 120 125
 Ala Lys Leu Glu Val Ala Pro Ile Ser Asp Ile Ile Ala Ile Lys Ser
 130 135 140
 Pro Asp Thr
 145

<210> 766

<211> 36

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 766

Gly Arg Glu Ala Glu Ala Xaa Gln Leu Glu Ser Ser Lys Arg Phe Ala
 1 5 10 15
 Lys Xaa Phe Met Asp Arg His Gly Ile Pro Thr Ala Gln Trp Glu Gly
 20 25 30
 Phe His Gln Thr
 35

753

<210> 767
 <211> 105
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (62)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (68)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (80)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (98)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (100)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (105)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 767
 Arg Phe Ala Leu Ser Thr Lys Ile Pro Asp Thr Lys Gly Cys Leu Gln
 1 5 10 15
 Cys Arg Val Val Arg Asn Pro Tyr Thr Gly Ala Thr Phe Leu Leu Ala
 20 25 30
 Ala Leu Pro Thr Ser Leu Leu Leu Leu Gln Trp Tyr Glu Pro Leu Gln
 35 40 45
 Lys Phe Leu Leu Leu Lys Asn Phe Ser Ser Pro Leu Pro Xaa Pro Ala
 50 55 60
 Gly Met Leu Xaa Pro Leu Val Leu Asp Gly Lys Glu Leu Pro Gln Xaa
 65 70 75 80

754

Phe Phe Gly Ala Glu Gly Pro Lys Gly Pro Gly Cys Arg Phe Leu Phe
 85 90 95

Gln Xaa Leu Xaa Leu Gly Gly Trp Xaa
 100 105

<210> 768

<211> 154

<212> PRT

<213> Homo sapiens

<400> 768

Val Thr Leu Thr Gln Cys Ser Glu Lys Leu Val Gln Leu Ile Leu His
 1 5 10 15

Glu Tyr Lys Ile Phe Asn Ala Glu Val Leu Phe Arg Glu Asp Cys Ser
 20 25 30

Pro Asp Glu Phe Ile Asp Val Ile Val Gly Asn Arg Val Tyr Met Pro
 35 40 45

Cys Leu Tyr Val Tyr Asn Lys Ile Asp Gln Ile Ser Met Glu Glu Val
 50 55 60

Asp Arg Leu Ala Arg Lys Pro Asn Ser Val Val Ile Ser Cys Gly Met
 65 70 75 80

Lys Leu Asn Leu Asp Tyr Leu Leu Glu Met Leu Trp Glu Tyr Leu Ala
 85 90 95

Leu Thr Cys Ile Tyr Thr Lys Lys Arg Gly Gln Arg Pro Asp Phe Thr
 100 105 110

Asp Ala Ile Ile Leu Arg Lys Gly Ala Ser Val Glu His Val Gly Thr
 115 120 125

Ser Thr Lys Tyr Ser Pro Gln Arg Val Gly Leu Thr His Thr Met Glu
 130 135 140

His Glu Asp Val Ile Gln Ile Val Lys Lys
 145 150

<210> 769

<211> 89

<212> PRT

<213> Homo sapiens

755

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (84)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 769
Asn Gln Ala Gly Leu Thr Ala Asp Arg Met Leu Val Leu Ser Arg Ala
1 5 10 15
Gly Gln Ala Ala Gly Leu Thr Phe Asn Gln Thr Ser Glu Ser Leu Ser
20 25 30
Ala Leu Val Lys Ala Gly Val Ser Gly Glu Ala Gln Ile Ala Ser Ile
35 40 45
Ser Gln Ser Val Ala Arg Phe Xaa Ser Ala Ser Gly Val Glu Val Asp
50 55 60
Lys Val Val Glu Ala Phe Glu Gly Gly Pro Tyr Pro Phe Ala Tyr Ser
65 70 75 80
Lys Arg Ile Xaa Ile Ile Ala Val Phe
85

<210> 770
<211> 85
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (79)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (83)
<223> Xaa equals any of the naturally occurring L-amino acids

756

<220>

<221> SITE

<222> (84)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 770

Gln	Thr	Ser	Arg	Ala	Glu	Ser	Ala	Ser	Met	Thr	Glu	Arg	Arg	Val	Pro
1				5					10					15	

Phe	Ser	Leu	Leu	Arg	Gly	Pro	Ser	Trp	Asp	Pro	Phe	Arg	Asp	Trp	Tyr
			20					25					30		

Pro	His	Ser	Arg	Leu	Phe	Asp	Gln	Ala	Phe	Gly	Leu	Pro	Arg	Leu	Pro
		35					40					45			

Glu	Glu	Trp	Ser	Gln	Trp	Leu	Gly	Xaa	Ser	Ser	Trp	Pro	Gly	Tyr	Val
	50					55					60				

Arg	Pro	Leu	Pro	Pro	Ala	Ala	Ser	Arg	Ala	Pro	Gln	Trp	Pro	Xaa	Pro
65					70					75					80

Leu	Gln	Xaa	Xaa	Ala
				85

<210> 771

<211> 76

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (50)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (70)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 771

Asp	Tyr	Cys	Gln	Val	Val	Arg	Pro	Ser	Pro	Ser	Gly	Glu	Thr	Ile	Thr
1				5					10					15	

Tyr	Arg	Gln	Val	Val	Leu	Ser	Val	Asn	Val	Lys	Ser	Pro	Ala	Leu	Leu
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

757

20 25 30
 Leu Ser Gln Leu Leu Pro Tyr Met Glu Asn Lys Lys Gly Ala Val Xaa
 35 40 45
 Leu Xaa Ser Ser Ile Ala Ala Tyr Asn Pro Val Val Ala Leu Gly Val
 50 55 60
 Tyr Asn Val Ser Lys Xaa Glu Leu Leu Gly Ser His
 65 70 75

<210> 772

<211> 105

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 772

Gly Ala Glu Glu Gly Arg Gln Glu Ala Gln Gly Xaa Arg Lys Glu Ser
 1 5 10 15

Tyr Ser Val Tyr Val Tyr Lys Val Leu Lys Gln Val His Pro Asp Thr
 20 25 30

Gly Ile Ser Ser Lys Ala Met Gly Ile Met Asn Ser Phe Val Asn Asp
 35 40 45

Ile Phe Glu Arg Ile Ala Gly Glu Ala Ser Arg Leu Ala His Tyr Asn
 50 55 60

Lys Arg Ser Thr Ile Thr Ser Arg Glu Ile Gln Thr Ala Val Arg Leu
 65 70 75 80

Leu Leu Pro Gly Glu Leu Ala Lys His Ala Val Ser Glu Gly Thr Lys
 85 90 95

Ala Val Thr Lys Tyr Thr Ser Ala Lys
 100 105

<210> 773

<211> 144

<212> PRT

<213> Homo sapiens

<220>
 <221> SITE
 <222> (98)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (132)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (139)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (140)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (141)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 773
 Phe Ala His Leu Pro Lys Ser Thr Phe Val Leu Asp Glu Phe Lys Arg
 1 5 10 15
 Lys Tyr Ser Asn Glu Asp Thr Leu Ser Val Ala Leu Pro Tyr Phe Trp
 20 25 30
 Glu His Phe Asp Lys Asp Gly Trp Ser Leu Trp Tyr Ser Glu Tyr Arg
 35 40 45
 Phe Pro Glu Glu Leu Thr Gln Thr Phe Met Ser Cys Asn Leu Ile Thr
 50 55 60
 Gly Met Phe Gln Arg Leu Asp Lys Leu Arg Lys Asn Ala Phe Ala Ser
 65 70 75 80
 Val Ile Leu Phe Gly Thr Asn Asn Ser Ser Ser Ile Ser Gly Val Trp
 85 90 95
 Val Xaa Pro Gly Gln Glu Leu Ala Phe Pro Leu Ser Pro Asp Trp Gln
 100 105 110
 Val Asp Tyr Glu Val Ile His Met Ala Glu Thr Gly Ser Gly Lys Arg
 115 120 125

759

Gly Asp Pro Xaa Ala Gly Ser Arg Val Leu Xaa Xaa Xaa Arg Gly Pro
 130 135 140

<210> 774

<211> 64

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (7)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 774

Ile Arg His Glu Arg Glu Xaa Glu Gln Gly Val Tyr Thr Cys Thr Ala
 1 5 10 15

Gln Gly Ile Trp Lys Asn Glu Gln Lys Gly Glu Lys Ile Pro Arg Cys
 20 25 30

Leu Pro Val Cys Gly Lys Pro Val Asn Pro Val Glu Gln Arg Gln Arg
 35 40 45

Ile Ile Gly Gly Gln Lys Ala Xaa Gly Ile Val Gly Ala Phe Leu Gln
 50 55 60

<210> 775

<211> 69

<212> PRT

<213> Homo sapiens

<400> 775

Asn Ile Ser Asn Ser Gln Val Asn Arg Leu Arg His Phe Val Arg Ala
 1 5 10 15

Gly Leu Arg Ser Leu Phe Arg Pro Glu Pro Gln Thr Ala Val Glu Trp

760

	20		25		30
Ala	Asp	Ala	Asn	Tyr	Tyr
	35		40		45
Leu	Pro	Lys	Glu	Ser	Ala
Tyr	Gln	Glu	Gly		
Arg	Trp	Glu	Thr	Leu	Pro
	50		55		60
Phe	Gln	Arg	Ala	Ile	Met
Asn	Ala	Asn	Gly		
Gln	Arg	Leu	His	Pro	
	65				

<210> 776

<211> 56

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (54)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (55)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 776

Glu	Arg	Val	Phe	Xaa	Pro	His	Gly	Leu	Ile	Met	Asp	Arg	Thr	Xaa	Arg
1				5					10					15	

Phe	Ala	Arg	Asn	Val	Met	Lys	Glu	Met	Gly	Gly	His	His	Ile	Xaa	Val
			20					25					30		

Leu	Phe	Leu	Leu	Lys	Gly	Gly	Tyr	Lys	Phe	Phe	Ala	Asp	Leu	Leu	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

761

35 40 45
 Tyr Ile Lys Gly Leu Xaa Xaa Lys
 50 55

 <210> 777
 <211> 134
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (4)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (5)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (6)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 777
 Leu Gln Phe Xaa Xaa Xaa Met Ile Thr Pro Ser Ser Asn Thr Thr His
 1 5 10 15
 Tyr Arg Glu Ser Trp Tyr Ala Cys Arg Tyr Arg Ser Gly Ile Pro Gly
 20 25 30
 Ser Thr His Ala Ser Gly Val Phe Glu Val His Lys Lys Asn Val Arg
 35 40 45
 Gly Glu Phe Thr Tyr Tyr Glu Ile Gln Asp Asn Thr Gly Lys Met Glu
 50 55 60
 Val Val Val His Gly Arg Leu Thr Thr Ile Asn Cys Glu Glu Gly Asp
 65 70 75 80
 Lys Leu Lys Leu Thr Cys Phe Glu Leu Ala Pro Lys Ser Gly Asn Thr
 85 90 95
 Gly Glu Leu Arg Ser Val Ile His Ser His Ile Lys Val Ile Lys Thr
 100 105 110
 Arg Lys Asn Lys Lys Asp Ile Leu Asn Pro Asp Ser Ser Met Glu Thr
 115 120 125

762

Ser Pro Asp Phe Phe Phe
130

<210> 778
<211> 133
<212> PRT
<213> Homo sapiens

<400> 778
Thr Ile Thr Ser Gly Gly Asn Pro Pro Ala Phe Ser Leu Thr Pro Asp
1 5 10 15
Gly Lys Leu Thr Ala Lys Asn Ala Asp Ile Ser Gly Ser Val Asn Ala
20 25 30
Asn Ser Gly Thr Leu Ser Asn Val Thr Ile Ala Glu Asn Cys Thr Ile
35 40 45
Asn Gly Thr Leu Arg Ala Glu Lys Ile Val Gly Asp Ile Val Lys Ala
50 55 60
Ala Ser Ala Ala Phe Pro Arg Gln Val Glu Ser Ser Val Asp Trp Pro
65 70 75 80
Ser Gly Thr Arg Thr Val Thr Val Thr Asp Asp His Pro Phe Asp Arg
85 90 95
Gln Ile Val Val Leu Pro Leu Thr Phe Arg Gly Ser Lys Arg Thr Val
100 105 110
Ser Gly Arg Thr Thr Tyr Ser Met Cys Tyr Leu Lys Val Leu Met Asn
115 120 125
Gly Ala Val Ile Tyr
130

<210> 779
<211> 90
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (52)
<223> Xaa equals any of the naturally occurring L-amino acids

763

<220>

<221> SITE

<222> (63)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 779

Pro	Asn	Thr	Ala	Leu	Val	Gly	Val	Gln	Val	Asp	Ser	Glu	Gln	Phe	Gly
1				5				10						15	

Ser	Gln	Gln	Val	Ser	Arg	Asn	Tyr	His	Leu	Arg	Gly	Arg	Ile	Leu	Gln
			20					25					30		

Val	Pro	Ser	Asn	Tyr	Asn	Pro	Gln	Thr	Arg	Gln	Tyr	Ser	Gly	Ile	Trp
		35					40					45			

Asp	Gly	Thr	Xaa	Lys	Pro	Ala	Tyr	Ser	Asn	Asn	Met	Ala	Trp	Xaa	Leu
	50					55					60				

Trp	Asp	Met	Leu	Thr	His	Pro	Arg	Tyr	Gly	Met	Gly	Lys	Arg	Leu	Gly
65					70					75					80

Ala	Ala	Asp	Val	Asp	Lys	Trp	Ala	Leu	Tyr
				85					90

<210> 780

<211> 82

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

764

<220>
 <221> SITE
 <222> (54)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (62)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (65)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (70)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
 <221> SITE
 <222> (73)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 780
 Val Xaa Arg Ala Ser Asp Asp Ala Glu Gly Tyr Leu Asp Xaa Phe Lys
 1 5 10 15
 Gly Lys Ile Thr Glu Ser His Leu Xaa Lys Glu Leu Leu Glu Lys Val
 20 25 30
 Glu Leu Thr Glu Asp Asn Ala Ser Arg Leu Glu Glu Phe Ser Lys Xaa
 35 40 45
 Trp Lys Asp Ala Ser Xaa Lys Trp Asn Ala Met Trp Ala Xaa Lys Ile
 50 55 60
 Xaa Gln Thr Lys Asp Xaa Lys Arg Xaa Leu Phe Cys Tyr Leu Val Val
 65 70 75 80
 Arg Ser

<210> 781
 <211> 49
 <212> PRT
 <213> Homo sapiens

765

<220>
 <221> SITE
 <222> (43)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (48)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (49)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 781
 Pro Asp Phe His Arg Glu Asp Asp Trp Trp Arg Asn Gly Gln Asn Leu
 1 5 10 15
 Tyr Leu Asp Asn Leu Glu Ala Thr Gly Leu Tyr Gln Val Pro Leu Ser
 20 25 30
 Ala Ala Gln Pro Gly Asp Val Leu Leu Cys Xaa Phe Gly Ser Ser Xaa
 35 40 45

 Xaa

<210> 782
 <211> 85
 <212> PRT
 <213> Homo sapiens

 <220>
 <221> SITE
 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (31)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 782
 Xaa Lys Glu Asn Gly Thr Val Thr Ala Ala Asn Ala Ser Thr Leu Asn
 1 5 10 15
 Asp Gly Ala Ala Ala Leu Val Leu Met Thr Ala Asp Ala Ala Xaa Arg
 20 25 30

766

Leu Asn Val Thr Pro Leu Ala Arg Ile Val Ala Phe Ala Asp Ala Ala
35 40 45

Val Glu Pro Ile Asp Phe Pro Ile Ala Pro Val Tyr Ala Ala Ser Met
50 55 60

Val Leu Lys Asp Val Gly Leu Lys Lys Glu Asp Ile Ala Met Trp Glu
65 70 75 80

Val Asn Gly Ser Leu
85

<210> 783

<211> 90

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (14)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (15)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (16)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (30)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE
 <222> (44)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (63)
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 <400> 783
 Gly Lys Ser Pro Ala Ser Trp Trp Gly Ser Ala Gly His Xaa Xaa Xaa
 1 5 10 15
 Pro Cys Arg Gly Ala Cys Ala Ala Ala Gly Xaa Thr Ala Xaa Arg Gly
 20 25 30
 Phe Ala Val Ser Ala Arg Xaa Val Trp Gln Thr Xaa Asp Arg Pro Gly
 35 40 45
 Thr Trp Asp Gln Ser Arg Asn Leu Leu Leu Asn Gly Lys Ser Xaa Pro
 50 55 60
 Thr Lys Val Arg Leu Ile Trp Gly Gly Ser Leu Pro Pro Val Lys Arg
 65 70 75 80
 Xaa Ala Asp Glu Leu Asp Xaa Arg Pro Gly
 85 90

 <210> 784
 <211> 84
 <212> PRT
 <213> Homo sapiens

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768

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<400> 784
 Ala Leu Leu Gly Leu Thr Ile Xaa Lys Ala Gly Thr Pro Ala Gly Thr
 1 5 10 15
 Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Leu Leu Cys Leu Glu
 20 25 30
 Gly Ile Ile Leu Ser Leu Phe Val Ile Ile Thr Ile Thr Ile Leu Ile
 35 40 45
 Asn His Leu Thr Leu Ala Ser Ile Thr Pro Ile Ile Leu Leu Val Xaa
 50 55 60
 Ala Ala Cys Glu Ala Xaa Leu Gly Leu Ile Pro Phe Ser Tyr Xaa Leu
 65 70 75 80
 Xaa Tyr Ile Arg

<210> 785
 <211> 61
 <212> PRT
 <213> Homo sapiens

<400> 785
 Ile Gly Phe Asp Asn Lys Lys Asp Leu Leu Ile Ser Val Gly Asp Leu
 1 5 10 15
 Val Asp Arg Gly Ala Glu Asn Val Glu Cys Leu Glu Leu Ile Thr Phe
 20 25 30

Pro Trp Phe Arg Ala Val Arg Gly Asn His Glu Gln Met Met Ile Asp
35 40 45

Gly Leu Ser Glu Arg Gly Asn Val Asn His Trp Leu Leu
50 55 60

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<210> 786
<211> 102
<212> PRT
<213> Homo sapiens
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<400> 786
Gly Leu Gln Pro Tyr Cys Tyr Xaa Thr Trp Arg Cys Arg Cys Thr Thr
1 5 10 15

Gly Gln Pro Gly Thr Ala Pro Ala Gly Thr Pro Gly Ala Pro Pro Leu
20 25 30

770

Xaa Gly Met Ala Ile Val Lys Glu Glu Glu Thr Glu Ala Ala Ile Gly
 35 40 45
 Ala Pro Pro Thr Ala Thr Glu Gly Pro Glu Thr Lys Pro Val Leu Xaa
 50 55 60
 Ala Leu Glu Glu Gly Pro Gly Ala Glu Gly Ser Arg Leu Asp Ser Leu
 65 70 75 80
 Val Ala Xaa Xaa Leu Xaa Leu Glu Val Val Ala Leu Arg Asp Ser Ala
 85 90 95
 Pro Val Leu Ala Gly Thr
 100

<210> 787

<211> 64

<212> PRT

<213> Homo sapiens

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (48)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 787

Cys Leu Xaa Arg Ala Arg Xaa Pro Ala Ala Ala Asn Ser Ser Gly Asp
 1 5 10 15

Gly Gly Ala Ala Gly Asp Gly Thr Val Val Asp Cys Pro Val Cys Lys
 20 25 30

Gln Gln Cys Phe Ser Lys Asp Ile Val Glu Asn Xaa Phe Met Arg Xaa
 35 40 45

771

Ser Gly Ser Lys Ala Ala Thr Asp Ala Gln Asp Ala Asn Gln Cys Cys
50 55 60

<210> 788

<211> 61

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 788

Thr Leu Ala Phe Phe Leu Ile Pro Cys Ile Gly Ser Pro Ala Cys Pro
1 5 10 15

Thr Met Ser Asp Ala Ala Val Asp Thr Ser Ser Glu Ile Thr Thr Lys
20 25 30

Asp Leu Lys Glu Lys Lys Glu Val Leu Glu Arg Gly Arg Lys Trp Lys
35 40 45

Arg Arg Pro Xaa Leu Thr Gly Asn Ala Asn Leu Gly Lys
50 55 60

<210> 789

<211> 69

<212> PRT

<213> Homo sapiens

$\langle 220 \rangle$

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 789

Ala Gln Asp Asn Phe Lys His Leu Asn Gly Ile Xaa Leu Phe His Cys
1 5 10 15

Ile Asp Pro Asn Gly Ser Lys His Lys Arg Thr Asp Arg Ser Ile Leu
20 25 30

772

Cys Cys Leu Arg Lys Gly Glu Ser Gly Gln Ser Trp Gln Gly Leu Thr
 35 40 45

Lys Glu Arg Ala Lys Leu Asn Trp Leu Ser Val Asp Phe Asn Asn Trp
 50 55 60

Glu Arg Leu Gly Arg
 65

<210> 790

<211> 51

<212> PRT

<213> Homo sapiens

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<400> 790

Gln Ser Thr Val Lys Leu Glu His Ala Lys Ser Val Ala Ser Arg Ala
 1 5 10 15

Thr Val Leu Gln Lys Xaa Ser Xaa Thr Pro Val Gly Met Phe Leu Lys
 20 25 30

Leu Asn Xaa Met Asn Val Lys Phe Xaa Ser Gly Tyr Tyr Glu Leu Pro
 35 40 45

Cys Arg Ser
 50

773

<210> 791
 <211> 154
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (78)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 791
 Asp Pro Gln Ala His Val Ala Met Leu Ser Ser Thr Ala Met Tyr Ser
 1 5 10 15
 Ala Pro Gly Arg Asp Leu Gly Met Glu Pro His Arg Ala Ala Gly Pro
 20 25 30
 Leu Gln Leu Arg Phe Ser Pro Tyr Val Phe Asn Gly Gly Thr Ile Leu
 35 40 45
 Ala Ile Ala Gly Glu Asp Phe Ala Ile Val Ala Ser Asp Thr Arg Leu
 50 55 60
 Ser Glu Gly Phe Ser Ile His Thr Arg Asp Ser Pro Lys Xaa Tyr Lys
 65 70 75 80
 Leu Thr Asp Lys Thr Val Ile Gly Cys Ser Gly Phe His Gly Asp Cys
 85 90 95
 Leu Thr Leu Thr Lys Ile Ile Glu Ala Arg Leu Lys Met Tyr Lys His
 100 105 110
 Ser Asn Asn Lys Ala Met Thr Thr Gly Ala Ile Ala Ala Met Leu Ser
 115 120 125
 Thr Ile Leu Tyr Ser Arg Arg Phe Phe Pro Tyr Tyr Val Tyr Asn Ile
 130 135 140
 Ile Gly Gly Leu Asp Glu Glu Gly Lys Gly
 145 150

<210> 792
 <211> 96
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (72)

774

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (74)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 792

Gly	Thr	Ala	Ser	Thr	Ala	Met	Tyr	Ser	Ala	Pro	Gly	Arg	Asp	Leu	Gly
1				5					10					15	

Met	Glu	Pro	His	Arg	Ala	Ala	Gly	Pro	Leu	Gln	Leu	Arg	Phe	Ser	Pro
			20					25					30		

Tyr	Val	Phe	Asn	Gly	Gly	Thr	Ile	Leu	Ala	Ile	Ala	Gly	Glu	Asp	Phe
		35					40					45			

Ala	Ile	Val	Ala	Ser	Asp	Thr	Arg	Leu	Ser	Glu	Gly	Phe	Ser	Ile	His
	50					55					60				

Thr	Arg	Asp	Ser	Pro	Lys	Cys	Xaa	Xaa	Xaa	Asn	Arg	Gln	Asn	Ser	His
65					70					75					80

Trp	Met	Gln	Arg	Phe	Ser	Trp	Arg	Leu	Ser	Tyr	Ala	Asp	Lys	Asp	Tyr
				85					90					95	

<210> 793

<211> 72

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (6)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 793

Arg	Pro	Pro	Val	Arg	Xaa	Phe	Leu	Arg	Asp	Phe	Phe	Met	Ser	Met	Tyr
1				5					10					15	

Thr	Thr	Ala	Gln	Leu	Leu	Ala	Ala	Asn	Glu	Gln	Lys	Phe	Lys	Phe	Asp
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

775

20 25 30
 Pro Leu Phe Leu Arg Leu Phe Phe Arg Glu Ser Tyr Pro Phe Thr Thr
 35 40 45
 Glu Glu Ser Leu Ser Leu Thr Asn Ser Gly Thr Gly Lys His Gly Ala
 50 55 60
 Val Arg Phe Ala Asp Cys Phe Arg
 65 70

<210> 794
 <211> 124
 <212> PRT
 <213> Homo sapiens

<400> 794
 Gly Ser Gly Asp His Glu Gly Gly Lys Gly Asp Gly Met Glu Glu Val
 1 5 10 15
 Pro His Asp Cys Pro Gly Ala Asp Ser Ala Gln Ala Gly Arg Gly Ala
 20 25 30
 Ser Cys Gln Gly Cys Pro Asn Gln Arg Leu Cys Ala Ser Gly Ala Gly
 35 40 45
 Ala Thr Pro Asp Thr Ala Ile Glu Glu Ile Lys Glu Lys Met Lys Thr
 50 55 60
 Val Lys His Lys Ile Leu Val Leu Ser Gly Lys Gly Gly Val Gly Lys
 65 70 75 80
 Ser Thr Phe Ser Ala His Leu Ala His Gly Leu Ala Glu Asp Glu Asn
 85 90 95
 Thr Gln Ile Ala Leu Leu Asp Ile Asp Ile Cys Gly Pro Ser Ile Pro
 100 105 110
 Lys Ile Met Gly Leu Glu Gly Glu Gln Val His Gln
 115 120

<210> 795
 <211> 144
 <212> PRT
 <213> Homo sapiens

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<222> (107)

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<222> (112)

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 795

Ala	Arg	Xaa	Trp	Leu	Xaa	Gly	Val	Thr	Phe	Xaa	Val	Thr	Thr	Val	Xaa
1				5					10					15	

Thr	Lys	Xaa	Arg	Thr	Glu	Xaa	Val	Gln	Lys	Leu	Cys	Pro	Gly	Gly	Gln
			20					25						30	

Xaa	Pro	Phe	Leu	Leu	Tyr	Xaa	Thr	Glu	Val	His	Thr	Asp	Thr	Asn	Lys
		35					40					45			

Xaa	Ala	Glu	Phe	Leu	Xaa	Ala	Val	Leu	Cys	Pro	Pro	Arg	Tyr	Pro	Xaa
	50					55					60				

Leu	Ala	Ala	Leu	Asn	Pro	Xaa	Ser	Asn	Thr	Ala	Xaa	Leu	Xaa	Ile	Phe
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

779

65		70		75		80									
Xaa	Lys	Xaa	Ser	Ala	Tyr	Xaa	Xaa	Xaa	Ser	Asn	Pro	Xaa	Leu	Asn	Asp
				85					90					95	
Asn	Leu	Glu	Xaa	Gly	Leu	Leu	Lys	Ala	Leu	Xaa	Val	Leu	Xaa	Asn	Xaa
			100					105						110	
Leu	Thr	Ser	Pro	Xaa	Ser	Glu	Glu	Val	Asp	Xaa	Thr	Ser	Ala	Xaa	Val
			115					120					125		
Lys	Val	Ser	Leu	Arg	Arg	Ser	Xaa	Trp	Ile	Ala	Arg	Ala	His	Pro	Gly
	130					135					140				

<210> 796

<211> 97

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 796

Ile	Met	Lys	Asn	Gly	Phe	Tyr	Ala	Thr	Tyr	Arg	Ser	Lys	Asn	Lys	Gly
1				5					10					15	

Lys	Asp	Lys	Arg	Ser	Ile	Asn	Leu	Ser	Val	Phe	Leu	Asn	Ser	Xaa	Leu
			20					25					30		

Ala	Asp	Asn	His	His	Leu	Gln	Val	Gly	Ser	Asn	Tyr	Leu	Tyr	Ile	His
		35				40						45			

Lys	Ile	Asp	Gly	Lys	Thr	Phe	Leu	Phe	Thr	Lys	Thr	Asn	Asp	Lys	Ser
	50					55					60				

Leu	Val	Gln	Lys	Ile	Asn	Arg	Ser	Lys	Ala	Ser	Val	Glu	Asp	Ile	Lys
65					70					75					80

Asn	Ser	Leu	Val	Asp	Asp	Gly	Ile	Ile	Gly	Ile	Pro	Ile	Phe	Phe	Val
				85					90					95	

Cys

780

<210> 797
 <211> 181
 <212> PRT
 <213> Homo sapiens

<220>
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<220>
 <221> SITE
 <222> (3)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 797
 Arg Xaa Xaa Pro Ser Leu Lys Gly Thr Lys Ala Gly Ala Pro Pro Arg
 1 5 10 15
 Cys Gly Arg Ser Arg Thr Ser Gly Ser Pro Gly Leu Gln Glu Phe Gly
 20 25 30
 Thr Arg Pro Ser Arg Leu Arg Lys Thr Arg Lys Leu Arg Gly His Val
 35 40 45
 Ser His Gly His Gly Arg Ile Gly Lys His Arg Lys His Pro Gly Gly
 50 55 60
 Arg Gly Asn Ala Gly Gly Leu His His His Arg Ile Asn Phe Asp Lys
 65 70 75 80
 Tyr His Pro Gly Tyr Phe Gly Lys Val Gly Met Lys His Tyr His Leu
 85 90 95
 Lys Arg Asn Gln Ser Phe Cys Pro Thr Val Asn Leu Asp Lys Leu Trp
 100 105 110
 Thr Leu Val Ser Glu Gln Thr Arg Val Asn Ala Ala Lys Asn Lys Thr
 115 120 125
 Gly Ala Ala Pro Ile Ile Asp Val Val Arg Ser Gly Tyr Tyr Lys Val
 130 135 140
 Leu Gly Lys Gly Lys Leu Pro Lys Gln Pro Val Ile Val Lys Ala Lys
 145 150 155 160
 Phe Phe Ser Arg Arg Ala Glu Glu Lys Ile Lys Ser Val Gly Gly Ala
 165 170 175

781

Cys Val Leu Val Ala
180

<210> 798

<211> 136

<212> PRT

<213> Homo sapiens

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<221> SITE

<222> (29)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 798

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Arg Lys Glu Gly Trp
1 5 10 15

Arg Glu Glu Lys Gly Pro Phe Cys His Gln Arg Arg Xaa Thr Arg Glu
20 25 30

Tyr Thr Ile Asn Ile His Lys Arg Ile His Gly Val Gly Phe Lys Lys
35 40 45

Arg Ala Pro Arg Ala Leu Lys Glu Ile Arg Lys Phe Ala Met Lys Glu
50 55 60

Met Gly Thr Pro Asp Val Arg Ile Asp Thr Arg Leu Asn Lys Ala Val
65 70 75 80

Trp Ala Lys Gly Ile Arg Asn Val Pro Tyr Arg Ile Arg Val Arg Leu
85 90 95

Ser Arg Lys Arg Asn Glu Asp Glu Asp Ser Pro Asn Lys Leu Tyr Thr
100 105 110

Leu Val Thr Tyr Val Pro Val Thr Thr Phe Lys Ile Ser Val Leu Asn
115 120 125

Ser Val Thr Val Ala Lys Ser Pro
130 135

<210> 799

<211> 142

<212> PRT

<213> Homo sapiens

<400> 799

782

Trp Ile Pro Arg Ala Ala Gly Ile Arg His Glu Ala Ala Leu Ala Ala
 1 5 10 15
 Cys Ala Ala Met Ala Lys Ile Lys Ala Arg Asp Leu Arg Gly Lys Lys
 20 25 30
 Lys Glu Glu Leu Leu Lys Gln Leu Asp Asp Leu Lys Val Glu Leu Ser
 35 40 45
 Gln Leu Arg Val Ala Lys Val Thr Gly Gly Ala Ala Ser Lys Leu Ser
 50 55 60
 Lys Ile Arg Val Val Arg Lys Ser Ile Ala Arg Val Leu Thr Val Ile
 65 70 75 80
 Asn Gln Thr Gln Lys Glu Asn Leu Arg Lys Phe Tyr Lys Gly Lys Lys
 85 90 95
 Tyr Lys Pro Leu Asp Leu Arg Pro Lys Lys Thr Arg Ala Met Arg Arg
 100 105 110
 Arg Leu Asn Lys His Glu Glu Asn Leu Lys Thr Lys Lys Gln Gln Arg
 115 120 125
 Lys Glu Arg Leu Tyr Pro Leu Arg Lys Tyr Ala Val Lys Ala
 130 135 140

<210> 800

<211> 74

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (14)

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<220>
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<400> 800
Xaa Xaa Tyr His Lys Tyr Lys Ala Lys Arg Asn Cys Trp Xaa Xaa Val
1 5 10 15
Arg Gly Val Xaa Met Asn Pro Val Glu His Pro Phe Gly Gly Gly Asn
20 25 30
His Gln His Ile Gly Lys Pro Ser Thr Ile Arg Arg Asp Ala Pro Ala
35 40 45
Gly Arg Lys Val Gly Leu Ile Ala Ala Xaa Xaa Xaa Gly Xaa Leu Xaa
50 55 60

784

Gly Thr Lys Xaa Val Gln Glu Lys Glu Asn
 65 70

<210> 801
 <211> 100
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE
 <222> (12)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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 <222> (49)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 801
 Met Thr Pro Val Gln Arg Gly Gly Pro Gly Ala Xaa Val Ala Leu Gly
 1 5 10 15
 Trp Gly Thr Ala Val Ala Ser Ala Arg Phe Arg Gln Trp His Pro Gly
 20 25 30
 Pro Gly Ser Arg Pro Trp Thr Gly Pro Gly Pro Arg Pro Arg Thr Arg
 35 40 45
 Xaa Gly Lys Ala Glu Asp Lys Glu Trp Met Pro Val Thr Lys Leu Gly
 50 55 60
 Arg Leu Val Lys Asp Met Lys Ile Lys Ser Leu Glu Glu Ile Tyr Leu
 65 70 75 80
 Phe Ser Leu Pro Ile Lys Glu Ser Glu Ile Ile Asp Ser Ser Trp Gly
 85 90 95
 Leu Ser Gln Gly
 100

<210> 802
 <211> 19
 <212> PRT
 <213> Homo sapiens

<220>
 <221> SITE

785

<222> (1)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 802

Xaa	Glu	Thr	Gln	Ala	Ile	Val	Cys	Gln	Gln	Leu	Asp	Leu	Thr	His	Leu
1					5				10				15		

Lys Gly Ala

<210> 803

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (51)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 803

Gly	Thr	Arg	Asp	Val	Arg	Arg	Val	Pro	Gly	Val	Ala	Pro	Thr	Leu	Val
1				5					10					15	

Arg	Ser	Ala	Ser	Glu	Thr	Ser	Glu	Lys	Arg	Pro	Phe	Met	Cys	Ala	Tyr
			20					25					30		

Pro	Gly	Cys	Asn	Lys	Arg	Tyr	Phe	Lys	Leu	Ser	His	Leu	Gln	Met	His
		35					40					45			

Ser	Arg	Xaa	Ala	His	Trp
		50			

<210> 804

<211> 140

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (98)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (104)

<223> Xaa equals any of the naturally occurring L-amino acids

786

<220>

<221> SITE

<222> (120)

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<222> (135)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (136)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 804

Phe	Lys	Ser	Tyr	Leu	Gly	Asp	Thr	Ile	Glu	Gly	Ser	Leu	Gln	Val	Thr
1				5					10					15	

Gly	Pro	Glu	Ile	Pro	Gly	Ser	Thr	His	Ala	Ser	Ala	Glu	Ser	Leu	Ser
			20					25					30		

Arg	Arg	Lys	Leu	Asp	Thr	Gly	Thr	Gly	Ser	Ala	Met	Arg	Leu	Leu	Pro
		35				40						45			

Arg	Leu	Leu	Leu	Leu	Leu	Leu	Leu	Val	Phe	Pro	Ala	Thr	Val	Leu	Phe
	50				55					60					

Arg	Gly	Gly	Pro	Arg	Gly	Leu	Leu	Ala	Val	Ala	Gln	Asp	Leu	Thr	Glu
65					70					75					80

Asp	Glu	Glu	Thr	Val	Glu	Asp	Ser	Ile	Ile	Glu	Asp	Glu	Asp	Asp	Glu
				85					90					95	

Ala	Xaa	Val	Glu	Glu	Asp	Glu	Xaa	Thr	Asp	Phe	Val	Glu	Asp	Lys	Glu
		100					105						110		

Glu	Glu	Asp	Val	Ser	Gly	Glu	Xaa	Glu	Thr	Leu	Pro	Ser	Ala	Asp	Thr
		115					120					125			

Thr	Ile	Leu	Phe	Leu	Lys	Xaa	Xaa	Ile	Phe	Arg	Gln
	130					135					140

<210> 805

<211> 130

<212> PRT

<213> Homo sapiens

<220>

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<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (119)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (120)

<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 805

Phe	Glu	Ala	Asn	Arg	Gln	Arg	Ala	Thr	Met	Ala	Val	Ala	Arg	Ala	Ala
1				5					10					15	

Leu	Gly	Pro	Leu	Val	Thr	Gly	Leu	Tyr	Asp	Val	Gln	Ala	Phe	Lys	Phe
			20					25						30	

Gly	Asp	Phe	Val	Leu	Lys	Ser	Gly	Leu	Ser	Ser	Pro	Ile	Tyr	Ile	Asp
		35						40					45		

Leu	Arg	Gly	Ile	Val	Ser	Arg	Pro	Arg	Leu	Leu	Ser	Gln	Val	Ala	Asp
	50					55					60				

Ile	Leu	Phe	Gln	Thr	Ala	Gln	Asn	Ala	Gly	Ile	Ser	Phe	Asp	Thr	Val
65					70					75					80

Cys	Gly	Val	Pro	Tyr	Thr	Ala	Leu	Pro	Leu	Ala	Thr	Val	Ile	Cys	Ser
				85					90					95	

Thr	Asn	Gln	Ile	Pro	Met	Leu	Ile	Xaa	Arg	Lys	Glu	Thr	Lys	Asp	Tyr
			100					105					110		

Gly	Thr	Lys	Arg	Leu	Val	Xaa	Xaa	Ile	Leu	Ile	Xaa	Xaa	Lys	Leu	Phe
		115					120						125		

Asn His

788

130

<210> 806

<211> 35

<212> PRT

<213> Homo sapiens

<400> 806

Val Ala Asp Ile Ala Trp Trp Phe Arg Arg Arg Ile Phe Ile Ala Val
1 5 10 15

Leu Arg Cys Asn Ser Ser Ile Ser Asp Ala Glu Ser Met Met Ser Ala
20 25 30

Ile Phe His
35

<210> 807

<211> 72

<212> PRT

<213> Homo sapiens

<220>

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<222> (7)

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<220>

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789

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<220>
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 <222> (68)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 807
 Asp Trp Arg Gln Thr Ser Xaa Ser Gly Ala His Gly Arg Leu Lys Pro
 1 5 10 15
 Trp Xaa Asn Pro Xaa Ala Arg Arg Asp Ala Arg Glu Asp Arg Ala Thr
 20 25 30
 Trp Lys Ser Asn Tyr Xaa Leu Lys Ile Xaa Gln Arg Ile Gly Met Ile
 35 40 45
 Ile Leu Lys Trp Val Xaa Leu Val Gly Ser Glu Tyr Xaa Met Val Gly
 50 55 60
 Xaa Pro Xaa Xaa Ser Met Ala Ser
 65 70

<210> 808
 <211> 53
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (30)

790

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (52)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 808

Pro Ser Leu Lys Gly Thr Lys Ala Gly Asn Asp Leu Val Ser Leu Arg
1 5 10 15

Ala Ala Arg Thr Leu Arg Pro Pro Gly Thr Lys Pro Gly Xaa Gly Ala
20 25 30

Thr Phe Gly Pro Gly Leu Ser Glu Arg Ala Ser Ala Gln Arg Gly Ser
35 40 45

Gly Gln Leu Xaa His
50

<210> 809

<211> 70

<212> PRT

<213> Homo sapiens

<220>

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<222> (2)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (16)

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<220>
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<400> 809
 Ala Xaa Glu Tyr Thr Leu Arg Thr Ser Gly Leu Thr Val Arg Pro Xaa
 1 5 10 15
 Thr Ser Gly Pro Gly Cys Xaa Cys Gln Gly Gly Leu Ser Asp Leu Arg
 20 25 30
 Met Gly Xaa Met Glu Trp Xaa Arg Arg Asp Ala Gly Val Xaa Ala Gly
 35 40 45
 Xaa Asp Arg Ser Xaa Thr His Glu Cys Gln Val Gln Val Val Arg Val
 50 55 60
 Gly Asp Met Ser Leu Glu
 65 70

<210> 810
 <211> 39
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (1)
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<220>
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 <223> Xaa equals any of the naturally occurring L-amino acids

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792

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (18)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (39)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 810

Xaa	Ile	Xaa	Xaa	Cys	Gly	Phe	Glu	Pro	Pro	His	Phe	Leu	Thr	Leu	Asn
1				5				10						15	

Leu	Xaa	Met	His	Arg	Xaa	Ser	Cys	Pro	Leu	Asp	Cys	Lys	Val	Tyr	Val
			20					25					30		

Gly	Ile	Leu	Gly	Thr	Met	Xaa
						35

<210> 811

<211> 27

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (24)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (25)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 811

793

Gly Arg Glu Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
1 5 10 15

Lys Lys Lys Lys Lys Xaa Pro Xaa Xaa Gly Pro
20 25

<210> 812

<211> 72

<212> PRT

<213> Homo sapiens

<220>

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<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 812

Arg Arg Arg Xaa Arg Pro Ala Pro Pro Pro Gly Ala Cys Leu His Leu
1 5 10 15

Arg Leu Pro Lys Xaa Leu Gly Gln Arg Leu Asp Ala Arg His Gln Gly
20 25 30

Pro Val Glu Val Leu Gln Glu Glu Arg Arg Pro Arg Pro Arg Leu Pro
35 40 45

Arg Pro Ala Leu Ala Thr Leu Ser Ala Arg Phe Thr Asn Lys Leu Ser
50 55 60

Asp Pro Lys Lys Lys Lys Lys Lys
65 70

<210> 813

<211> 27

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

794

<220>
<221> SITE
<222> (5)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 813
Asn Ser Ala Xaa Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
1 5 10 15
Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
20 25

<210> 814
<211> 23
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 814
Asn Ser Ala Gln Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
1 5 10 15
Lys Lys Lys Lys Lys Lys Xaa
20

<210> 815
<211> 46
<212> PRT
<213> Homo sapiens

<220>
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<222> (16)
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<222> (37)

<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (38)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (46)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 815

Phe	Asp	Gln	Arg	Thr	Arg	Ile	Thr	Arg	Pro	Gln	Arg	Arg	Val	Phe	Xaa
1				5					10					15	

Ala	Ser	Xaa	Ser	Pro	Pro	Lys	Xaa	Ile	Thr	Asn	Cys	Ile	Tyr	Xaa	Lys
			20					25					30		

Ile	Asn	Arg	Tyr	Xaa	Xaa	Leu	Asn	Ile	Ala	Ile	Gln	Ile	Xaa
		35					40					45	

<210> 816

<211> 52

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (22)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (41)
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 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
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 <222> (50)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <400> 816
 Asn Ser Ala Xaa Leu Lys Gln Thr Gly Leu Lys Gly Val Thr Phe Asn
 1 5 10 15

 Lys Arg Met Lys Met Xaa Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
 20 25 30

 Lys Lys Lys Lys Lys Lys Lys Lys Xaa Pro Gly Gly Xaa Pro Pro Pro
 35 40 45

 Pro Xaa Pro Pro
 50

 <210> 817
 <211> 113
 <212> PRT
 <213> Homo sapiens

 <220>
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 <222> (1)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
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 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (68)
 <223> Xaa equals any of the naturally occurring L-amino acids

 <220>
 <221> SITE
 <222> (69)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (100)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (110)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 817

Xaa	Ser	Gly	Arg	Gly	Gly	Ser	His	Ser	Arg	Asn	Leu	Val	Leu	Phe	Phe
1				5					10					15	

Pro	Gln	Leu	Gly	Lys	Arg	His	Met	Ser	Leu	Ala	Xaa	Pro	Ile	Ala	Asn
			20					25					30		

Pro	Val	Val	Gly	Phe	Leu	Ala	Tyr	Ser	Arg	Pro	Ser	Val	Leu	Pro	Gly
		35					40					45			

Trp	His	Arg	Pro	His	Arg	Thr	Ser	Arg	Val	Gly	Leu	Ser	Gly	Ser	Ser
	50				55						60				

Thr	Ala	Gly	Xaa	Xaa	Asn	Ser	Arg	Phe	Gly	Gly	Cys	Ser	Phe	Gln	Ala
65					70					75					80

Gly	Asp	Thr	Leu	Gly	Pro	Val	Val	Arg	Ser	Pro	Val	Leu	Arg	His	Leu
				85					90					95	

Val	Trp	Asn	Xaa	Arg	Leu	Ala	Val	Ser	Ile	Gly	Val	Gly	Xaa	Cys	Ala
		100						105					110		

Ala

<210> 818

<211> 132

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (5)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (9)
<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (11)
<223> Xaa equals any of the naturally occurring L-amino acids

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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (27)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (38)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
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<220>
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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (72)

<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (81)

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<222> (85)

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<222> (87)

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<222> (94)

<223> Xaa equals any of the naturally occurring L-amino acids

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<222> (97)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (105)

<223> Xaa equals any of the naturally occurring L-amino acids

800

<220>
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 <222> (108)
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<220>
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 <222> (121)
 <223> Xaa equals any of the naturally occurring L-amino acids

<220>
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 <222> (127)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 818
 Phe Phe Phe Phe Xaa Lys Gly Thr Xaa Thr Xaa Leu Pro Phe Xaa Pro
 1 5 10 15
 Asn Gln Asn Gln Asn Pro Xaa Gln Ser Ile Xaa Lys Ser Lys Pro Gly
 20 25 30
 Gln Asn Gln Asn Glu Xaa Xaa Lys Gln Ser Lys Ser Ser Gln Lys Gln
 35 40 45
 Lys Pro Lys Cys Arg Tyr Arg Xaa Xaa Val Gly Asp Gln Ala Thr Leu
 50 55 60
 Pro Leu Lys Trp Ser Gly Xaa Xaa Pro Lys Thr Ser Xaa Thr Xaa Phe
 65 70 75 80
 Xaa Xaa Ser Gly Xaa Gln Xaa Pro Val Pro Ser Gln Xaa Xaa Ala Ala
 85 90 95
 Xaa Leu Ile Leu Cys Gly Gly Leu Xaa Asn Ala Xaa Leu Ala Arg Cys
 100 105 110
 Ser Thr Gly Xaa Ile Ala Tyr Pro Xaa Val Leu Ser Gly Ser Xaa Ser
 115 120 125
 Leu Lys Leu Ala
 130

801

<210> 819
<211> 62
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (4)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (54)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (55)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 819
Asn Ser Ala Xaa Gln Thr Thr Pro Ser Leu Ser Tyr Val Phe Leu Leu
1 5 10 15
Gln Thr Thr Arg Gln Leu Leu Lys Pro Ala Ile His Val Tyr Phe Asn
20 25 30
Lys Leu Met Ala Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys Lys
35 40 45
Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Gly Pro Pro Pro Pro
50 55 60

<210> 820
<211> 40
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (7)
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<220>
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802

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<220>
 <221> SITE
 <222> (38)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 820
 Asp His Thr Ser Asp Thr Xaa Ala Trp Val Thr Glu Arg Asp Ser Val
 1 5 10 15
 Xaa Gly Lys Glu Lys Lys Lys Lys Lys Xaa Xaa Gly Gly Ala Pro Val
 20 25 30
 Pro Asn Trp Pro Tyr Xaa Gly Ser
 35 40

<210> 821
 <211> 64
 <212> PRT
 <213> Homo sapiens

<220>
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 <222> (2)
 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 821
 Ala Xaa Pro Thr Gln Gln Ser Phe Pro Gln Leu Pro Arg Arg Lys Gly
 1 5 10 15
 Pro Ser Trp Val Trp Asp His Lys Gly Gly Asp Cys Thr Pro Leu Pro
 20 25 30
 Leu Gly Pro Gly Cys Gly Gln Arg Pro Pro Cys Val Ser Arg Val Thr
 35 40 45
 Val Pro Leu Ser Cys Asp Ala Ile Ser Val Cys Ala Trp Ser Pro Gln
 50 55 60

803

<210> 822
<211> 61
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (23)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 822
His Leu Cys Phe Lys Trp Gly Ser Pro Cys Arg Gly Phe Ile Gly His
1 5 10 15
Trp Leu Ser Lys Cys Gln Xaa Trp Ala Gly Gly Gly Thr Glu Pro Pro
20 25 30
Gln His Cys Ala Leu Val Glu Lys Ala Leu Thr Cys His Ala Pro Leu
35 40 45
Lys Pro Pro Leu Leu Thr Cys Leu Leu His Pro Ser His
50 55 60

<210> 823
<211> 73
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (49)
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<220>
<221> SITE
<222> (57)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (72)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 823
Thr Ala Gly Arg Trp Pro Trp Lys Ser Glu Ser Ala Lys Glu Cys Val
1 5 10 15

804

Thr Thr His Leu Pro Asn Gln Leu Ala Leu Lys Met Asp Gly Ala Gly
 20 25 30

Ala Ser Gly Pro Tyr Pro Ser Val Ala Gly Ser Arg Glu Trp Thr Gly
 35 40 45

Xaa Ala Gly Ala Ala Arg Ala Arg Xaa Val Met Val Cys Val Gly Gly
 50 55 60

Arg Arg Arg Arg Arg Gly Cys Xaa Val
 65 70

<210> 824

<211> 34

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (3)

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<220>

<221> SITE

<222> (12)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (27)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (31)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 824

Pro Arg Xaa Arg Arg Gln Gln Gln Pro His His Xaa Val Ala Asp Gly
 1 5 10 15

Pro His Ala Gly Gly Pro Leu Pro Ala Leu Xaa Arg Arg Leu Xaa Leu
 20 25 30

Pro Leu

805

<210> 825
<211> 21
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (6)
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<220>
<221> SITE
<222> (7)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (19)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 825
Pro Tyr Ser Glu Ser Xaa Xaa Asn Ser Leu Ala Val Val Leu Gln Arg
1 5 10 15
Arg Asp Xaa Glu Asn
20

<210> 826
<211> 56
<212> PRT
<213> Homo sapiens

<220>
<221> SITE
<222> (48)
<223> Xaa equals any of the naturally occurring L-amino acids

<220>
<221> SITE
<222> (56)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 826
Met Ser Glu Ala Cys Ile Val Ile Ile Ser Tyr Phe Phe Pro Leu Asp
1 5 10 15
Pro Ser His Gln Met Phe Val Asp Phe Ile Arg Ile Phe Lys Leu Pro
20 25 30

806

Ala Ser Gly Phe Val Glu Leu Gly Ile Ser Val Ser Leu Ile Phe Xaa
35 40 45

Leu Leu Ser Cys Thr Tyr Phe Xaa
50 55

<210> 827

<211> 54

<212> PRT

<213> Homo sapiens

<220>

<221> SITE

<222> (4)

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<220>

<221> SITE

<222> (41)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (47)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 827

Asn Ser Lys Xaa Ile Thr Ile Lys Lys Ala Gly Thr Pro Ala Gly Thr
1 5 10 15

Gly Pro Glu Phe Pro Gly Arg Pro Thr Arg Pro Thr Ala Ala Arg Arg
20 25 30

Arg Gln Lys Gly Thr Ala Ala Arg Xaa Arg Gln Lys Gly Ala Xaa Glu
35 40 45

Arg Arg Arg Gln Lys Gly
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<210> 828

<211> 78

<212> PRT

<213> Homo sapiens

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<221> SITE

807

<222> (43)

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

<221> SITE

<222> (56)

<223> Xaa equals any of the naturally occurring L-amino acids

<400> 828

Leu	Val	Phe	Thr	Glu	Thr	Leu	Arg	Glu	His	Lys	Phe	Met	Gly	Phe	Leu
1					5					10				15	

Met	Met	Ile	Leu	Leu	Gly	Ile	Met	Ser	Tyr	Ser	Leu	Ser	Ser	Leu	Met
			20					25					30		

Asn	Val	Lys	Leu	His	Cys	Ser	Gln	Arg	Phe	Xaa	Leu	Leu	Ser	Thr	Ala
		35					40					45			

Ile	Asn	His	Gly	His	Ser	Pro	Xaa	Asn	Ile	Ile	Phe	Phe	Leu	Leu	Lys
	50					55					60				

Glu	Lys	Asn	Gly	Lys	Lys	Leu	Gln	Gly	Asn	Gly	Asn	Tyr	Tyr
65					70				75				

<210> 829

<211> 89

<212> PRT

<213> Homo sapiens

<400> 829

Ser	Ala	Glu	Glu	Lys	Lys	Leu	Thr	Arg	Ile	Pro	Ser	Val	Thr	Ala	Ser
1				5					10					15	

Glu	Gln	Gly	Arg	Ala	Gln	Arg	Arg	Ile	Pro	Ala	Pro	Arg	Arg	Gly	Ala
			20					25						30	

Gly	His	Val	Ala	Tyr	Gly	Arg	Pro	Ala	Pro	Arg	Arg	Arg	Ser	Trp	Gly
		35					40					45			

Ala	Gln	Val	Leu	Leu	Ile	Glu	Ala	Gln	Pro	Val	Asp	Gly	Val	Arg	Pro
		50				55					60				

Val	Ala	Ala	Pro	Gly	Ala	Pro	Gly	Pro	Gly	Leu	Pro	Gly	Val	Gly	Leu
65					70					75					80

Leu	Gly	Asn	Ala	Ala	Gln	Ser	Gly	Trp
					85			

808

<210> 830
<211> 43
<212> PRT
<213> Homo sapiens

<220>
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<222> (43)
<223> Xaa equals any of the naturally occurring L-amino acids

<400> 830
Pro Leu Ile Phe Ile Asn Ser Arg Ile His Thr Asp Ser Pro Gly Ile
1 5 10 15
Val Pro Ser His Ser Glu Asp Ala Leu Arg Thr Leu Gln Ile Leu Leu
20 25 30
Pro Tyr Ile Thr Leu Asn Ser Gly Leu Arg Xaa
35 40

<210> 831
<211> 110
<212> PRT
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809

<223> Xaa equals any of the naturally occurring L-amino acids

<220>

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<400> 831

Lys	Asp	Ser	Leu	Asp	Ser	Gly	Lys	Leu	Leu	Gly	Ser	Gln	Leu	Gln	Phe
1				5					10					15	

Ile	Thr	Val	Lys	Gly	Gln	Arg	Leu	Arg	Ser	Ala	Lys	Gly	Gly	Gly	Ala
			20				25						30		

Gln	Xaa	Arg	Ser	Thr	Thr	Asp	Glu	Ala	Thr	Ala	Ser	Ile	Cys	Pro	Leu
		35					40					45			

Pro	Val	Glu	Pro	Tyr	Arg	Gln	His	Leu	Ile	Leu	Thr	Ala	Thr	Cys	Asp
	50					55					60				

Asn	Xaa	Gln	Glu	Val	Leu	Pro	Ile	Leu	Pro	Thr	Arg	Ala	Ala	Ser	Leu
65					70					75					80

Gly	Asp	Leu	Cys	Val	Pro	Xaa	Phe	Xaa	Val	Cys	Leu	Gly	Asp	Arg	Val
			85						90					95	

Trp	Xaa	Xaa	Leu	Gly	Arg	Xaa	Arg	Val	His	Gly	Gly	Asp	Ser
			100					105					110

<210> 832

<211> 50

<212> PRT

<213> Homo sapiens

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<400> 832

Gln	Arg	Ser	Ile	Leu	Val	Thr	Trp	Phe	His	Cys	His	His	Leu	Val	Asp
1				5					10					15	

Val	Gln	Phe	Xaa	Thr	Ile	Leu	Ser	Ala	Pro	Ser	Gly	Ser	Leu	Ala	His
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

810

	20	25	30
Ser	Leu	Leu	Cys
Asn	Cys	Trp	Arg
Ile	Thr	Ala	Glu
Phe	Leu	Ala	Val
	35	40	45
Leu	Ser		
	50		

<210> 833

<211> 47

<212> PRT

<213> Homo sapiens

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<222> (13)

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<222> (17)

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<223> Xaa equals any of the naturally occurring L-amino acids

<400> 833

811

His Leu Lys Leu Leu Gly Leu Glu Arg Xaa Gln Arg Xaa Ser Gly Arg
 1 5 10 15

Xaa Thr Thr Leu Gly Gly Arg Ser Thr Gly Leu Val Ile Glu Leu Xaa
 20 25 30

Leu Xaa Arg Leu Leu Xaa Cys Xaa Met Asn Cys Asn Ile Cys Leu
 35 40 45

<210> 834

<211> 90

<212> PRT

<213> Homo sapiens

<220>

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<222> (2)

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<221> SITE

<222> (3)

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<221> SITE

<222> (21)

<223> Xaa equals any of the naturally occurring L-amino acids

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Glu Xaa Xaa Thr Glu Gly Tyr Gly Cys Glu Arg Arg Gln Lys Gly Thr
 1 5 10 15

Ala Ala Arg Arg Xaa Gln Lys Gly Thr Ala Ala Arg Arg Arg Gln Lys
 20 25 30

Gly Thr Ala Ala Arg Arg Arg Gln Lys Gly Thr Ala Ala Arg Arg Arg
 35 40 45

Gln Lys Val Arg Leu Arg Glu Asp Asp Arg Arg Ile Arg Leu Arg Glu
 50 55 60

Asp Asp Arg Arg Glu Asn Leu Ser Ser Thr Leu Asn Leu Pro Thr Glu
 65 70 75 80

Pro Ser Lys Ser Pro Cys Lys Phe Asn Cys
 85 90

812

<210> 835
<211> 51
<212> PRT
<213> Homo sapiens

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<222> (48)
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<400> 835
Asp Ile Xaa Leu Val Phe Ile Leu Lys Gln Phe Leu Gly Leu Phe Arg
1 5 10 15
Gly Ser Leu Cys Cys Leu Tyr Cys Ile Asp Leu Xaa Tyr Arg Cys Leu
20 25 30
Phe Ile Lys Lys Lys Ile Gln Lys Xaa Lys Lys Lys Ile Asn Lys Xaa
35 40 45
Lys Lys Xaa
50

<210> 836
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<212> PRT
<213> Homo sapiens

813

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 <222> (46)
 <223> Xaa equals any of the naturally occurring L-amino acids

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 <223> Xaa equals any of the naturally occurring L-amino acids

<400> 836
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 1 5 10 15
 Leu Asn Thr Ile Lys Thr Ala Phe Phe Phe Pro Ala Ser Ile Gln Pro
 20 25 30
 Thr Trp Phe Cys Phe Asn Lys Ser Leu Glu Lys Leu Ile Xaa Xaa
 35 40 45

<210> 837
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 <212> DNA
 <213> Homo sapiens

<400> 837
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 tctcccggaac tcctgaggtc acatgcgtgg tggaggacgt aagccacgaa gaccctgagg 180
 tcaagttcaa ctggtacgtg gacggcgtgg aggtgcataa tgccaagaca aagccgcggg 240
 aggagcagta caacagcacg taccgtgtgg tcagcgtcct caccgtcctg caccaggact 300
 ggctgaatgg caaggagtac aagtgcaagg tctccaacaa agccctccca acccccatcg 360
 agaaaaccat ctccaaagcc aaagggcagc cccgagaacc acaggtgtac accctgcccc 420
 catcccggga tgagctgacc aagaaccagg tcagcctgac ctgcctgggc aaaggcttct 480
 atccaagcga catcgccgtg gagtgggaga gcaatgggca gccggagaac aactacaaga 540
 ccacgcctcc cgtgctggac tccgacggct ccttcttcct ctacagcaag ctccaccgtg 600
 acaagagcag gtggcagcag gggaacgtct tctcatgctc cgtgatgcat gaggctctgc 660
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 gactctagag gat 733

<210> 838
 <211> 5
 <212> PRT
 <213> Homo sapiens

<220>

<221> SITE

<222> (3)

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<400> 838

Trp Ser Xaa Trp Ser

1 5

<210> 839

<211> 86

<212> DNA

<213> Homo sapiens

<400> 839

gcgcctcgag atttccccga aatctagatt tccccgaaat gatttccccg aaatgatttc 60
cccgaaatat ctgccatctc aattag 86

<210> 840

<211> 27

<212> DNA

<213> Homo sapiens

<400> 840

gcggcaagct ttttgcaaag cctaggc 27

<210> 841

<211> 271

<212> DNA

<213> Homo sapiens

<400> 841

ctcgagattt ccccgaaatc tagatttccc cgaaatgatt tccccgaaat gatttccccg 60
aaatatctgc catctcaatt agtcagcaac catagtccccg cccctaactc cgcccatccc 120
gcccctaact ccgcccagtt ccgcccattc tccgccccat ggctgactaa ttttttttat 180
ttatgcagag gccgaggccg cctcggcctc tgagctattc cagaagtagt gaggaggctt 240
ttttggaggc ctaggctttt gcaaaaagct t 271

<210> 842

<211> 32

<212> DNA

<213> Homo sapiens

<400> 842

gcgctcgagg gatgacagcg atagaacccc gg 32

815

<210> 843
<211> 31
<212> DNA
<213> Homo sapiens

<400> 843
gcgaagcttc gcgactcccc ggatccgcct c 31

<210> 844
<211> 12
<212> DNA
<213> Homo sapiens

<400> 844
ggggactttc cc 12

<210> 845
<211> 73
<212> DNA
<213> Homo sapiens

<400> 845
gcggcctcga ggggactttc ccggggactt tccggggact ttccgggact ttccatcctg 60
ccatctcaat tag 73

<210> 846
<211> 256
<212> DNA
<213> Homo sapiens

<400> 846
ctcgagggga ctttcccggg gactttccgg ggactttccg ggactttcca tctgccatct 60
caattagtca gcaaccatag tcccgccct aactccgcc atccgccccc taactccgcc 120
cagttccgcc cattctccgc cccatggctg actaattttt tttatttatg cagaggccga 180
ggccgcctcg gcctctgagc tattccagaa gtagtgagga ggcttttttg gaggcctagg 240
cttttgcaaa aagctt 256

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/05881

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : C07H 21/04; C07K 5/04, 16/00; G01N 33/53

US CL : 536/23.1; 530/300, 387.9; 436/501

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

U.S. : 536/23.1; 530/300, 387.9; 436/501

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

East, GenEmbl, EST, GeneSeq, PIR-63, SwissProt, SPTREMBL, Issued patents sequence database: SEQ ID NO:1 and monoamine adj oxidase

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	ZHU et al. Promoter organization and activity of human monoamine oxidase (MOA) A and B genes. J. Neurosci. November 1992, Vol. 12, No. 11, pages 4437-4446, especially pages 4438-4439.	1-12, 14-16, 20-23 ----- 13, 17-19
X ----- Y	CHEN et al. The deduced amino acid sequences of human platelet and frontal cortex monoamine oxidase B are identical. J. Neurochem. July 1993, Vol. 61, No. 1, pages 187-190, especially pages 188-190.	1-7, 11-12 ----- 19
X ----- Y	GRIMSBY et al. Human monoamine oxidase A and B genes exhibit identical exon-intron organization. Proc. Natl. Acad. Sci., USA. May 1991, Vol. 88, pages 3637-3641, especially 3638-3640.	1-12, 20-21 and 23 ----- 17-19

☒ Further documents are listed in the continuation of Box C.
 ☐ See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier document published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

01 JUNE 2000

Date of mailing of the international search report

05 JUL 2000

 Name and mailing address of the ISA/US
 Commissioner of Patents and Trademarks
 Box PCT
 Washington, D.C. 20231

Facsimile No. (703) 305-3230

Authorized officer

MARJORIE MORAN

Telephone No. (703) 308-1235

 JOYCE BRIDGERS
 PARALEGAL SPECIALIST
 CHEMICAL MATRIX

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US00/05881

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X ----- Y	BACH et al. cDNA cloning of human liver monoamine oxidase A and B: Molecular basis of differences in enzymatic properties. Proc. Natl. Acad. Sci., USA. July 1988, Vol. 85, pages 4934-4938, especially pages 4935-4936.	1-16, 20-23 ----- 17-19
Y	US 5,783,680 A (BRUNNER et al.) 21 July 1998, columns 5-15.	13, 17-19

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/05881

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please See Extra Sheet.

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-23, SEQ ID NO:1

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
☐ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/US00/05881

BOX II. OBSERVATIONS WHERE UNITY OF INVENTION WAS LACKING

This ISA found multiple inventions as follows:

This application contains the following inventions or groups of inventions which are not so linked as to form a single inventive concept under PCT Rule 13.1. In order for all inventions to be searched, the appropriate additional search fees must be paid.

Group I, claim(s) 1-10 and 21, drawn to isolated nucleic acid sequences, a gene, a recombinant vector and host cells comprising the sequences.

Group II, claim(s) 11-12 and 14, drawn to an isolated polypeptide and a recombinant host cell expressing the polypeptide.

Group III, claim(s) 13, drawn to an antibody.

Group IV, claim(s) 15-16, drawn to a method of making a polypeptide and the polypeptide made.

Group V, claim(s) 17, drawn to a method of preventing, treating, or ameliorating a medical condition by administering a polypeptide or a polynucleotide.

Group VI, claim(s) 18, drawn to a method of diagnosis using a polynucleotide.

Group VII, claim(s) 19, drawn to a method of diagnosis using a polypeptide.

Group VIII, claim(s) 20 and 23, drawn to a method of identifying a binding partner to a polypeptide.

Group IX, claim(s) 22, drawn to a method of identifying biological activity.

In addition, each isolated nucleic acid represented by SEQ ID NO: X is a separate product, not necessarily related to any other nucleic acid represented by SEQ ID NO: X. Each polypeptide is likewise considered a separate product, not necessarily related to any other polypeptide sequence, or to any nucleotide sequence. Applicant is required to elect either ten nucleic acid sequences or one polypeptide sequence for search.

The inventions listed as Groups I-IX do not relate to a single inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: every nucleic acid sequence claimed is not unique (SEQ ID NO: 1 is not unique, see the Search report), and therefore does not represent a special technical feature. As the nucleic acid would be the "linking" feature, and the nucleic acid is not a special technical feature, the claims do not relate to a single inventive concept. Because there is no single inventive concept, a method of use is not included with the nucleic acids of Group I.

Although unity of invention is lacking for Groups I-IX, as previously set forth, no invitation to pay for a search for extra groups has been made. However, unity of invention is also lacking with regard to sequences and applicant was invited to pay for a search for additional groups of sequences. Applicant elected only SEQ ID NO:1, therefore no extra search fees are due.